CDX-M8800/M8805X

SERVICE MANUAL

Ver 1.1 2004. 05

US Model
Canadian Model
CDX-M8800/M8805X
AEP Model
UK Model
E Model
CDX-M8800

Photo: CDX-M8800

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	CDX-F5500
CD Drive Mechanism Type	MG-611MA-186//K
Optical Pick-up Name	KSS1000E

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US MODEL)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23.2 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

CD player section

Signal-to-noise ratio	120 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	87.5 – 107.9 MHz (US, Canadian model) 87.5 – 108.0 MHz (AEP, UK, E model)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM (US, Canadian model)

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

MW/LW (AEP, UK, E model)

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	52 W × 4 (at 4 ohms)

General

Outputs	Audio output terminals (front/rear) Subwoofer output terminal (mono) Power antenna relay control terminal (US, Canadian model) Power aerial relay control terminal (AEP, UK, E model) Power amplifier control terminal

– Continued on next page –

FM/AM COMPACT DISC PLAYER
US, Canadian Model

FM/MW/LW COMPACT DISC PLAYER
AEP, UK, E Model

9-877-515-02
2004E04-1
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Sony Corporation
e Vehicle Company
Published by Sony Engineering Corporation

SONY®

Inputs	Telephone ATT control terminal Illumination control terminal BUS control input terminal BUS audio input or AUX IN terminal Remote controller input terminal Antenna input terminal (US, Canadian model) Aerial input terminal (AEP, UK, E model)
Tone controls	US, Canadian model: Bass ±10 dB at 62 Hz Treble ±10 dB at 16 kHz AEP, UK, E model: Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Loudness	+8 dB at 100 Hz +2 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 184 mm (7 1/8 × 2 × 7 1/4 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 162 mm (7 1/4 × 2 1/8 × 6 1/2 in.) (w/h/d)
Mass	Approx. 1.7 kg (3 lb. 12 oz.)
Supplied accessories	Parts for installation and connections (1 set) Card remote commander RM-X143A (US, Canadian model) RM-X142 (AEP, UK, E model)

Note
This unit cannot be connected to a digital preamplifier or an equalizer.

Design and specifications are subject to change without notice.

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

• US, Canadian model

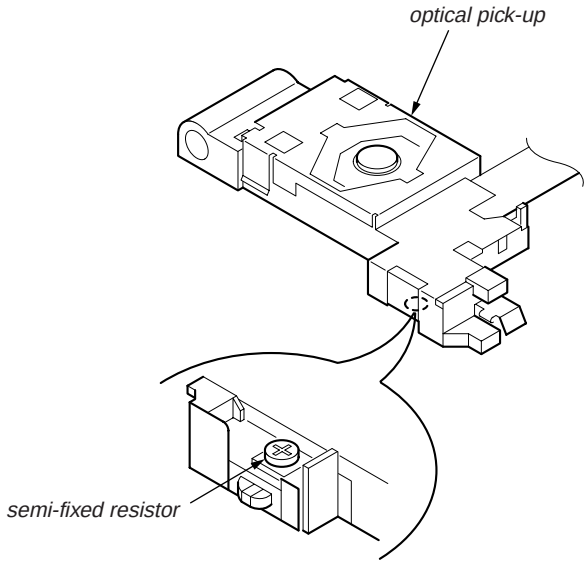
CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

• AEP, UK, E model

CLASS 1
LASER PRODUCT

This label is located on the bottom of the chassis.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



TEST DISCS

This set can playback CD-R and CD-ROM discs. The following test discs should be used to check the capability:

CD-R test disc TCD-R082LMT (Part No. J-2502-063-1)
CD-RW test disc TCD-W082L (Part No. J-2502-063-2)

Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs)

This unit can play the following discs:

Type of discs	Label on the disc
Audio CD	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable
MP3 files	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable COMPACT disc ReWritable

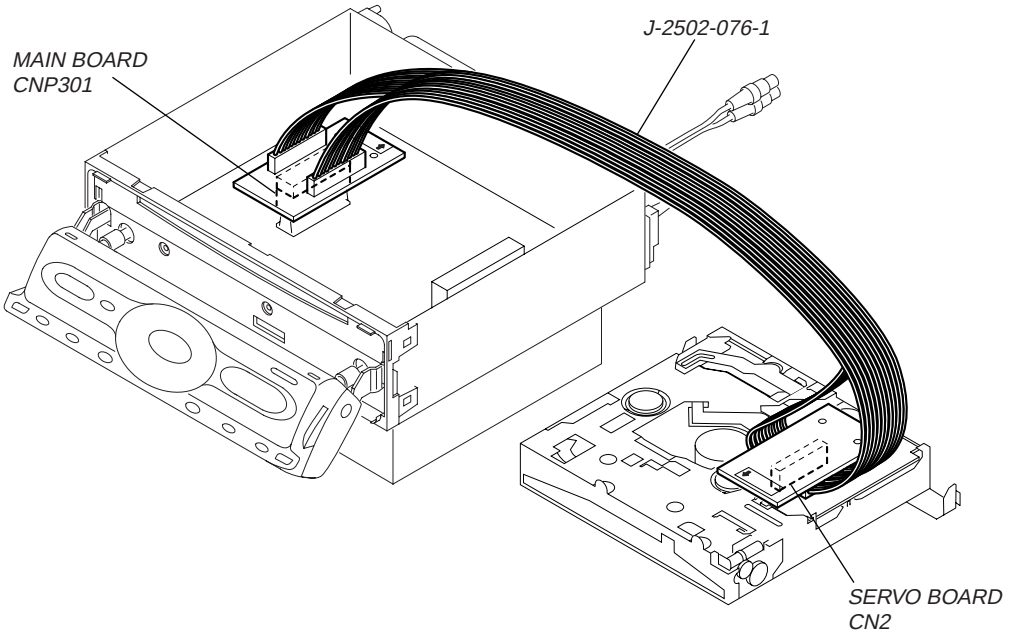
- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.
- You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.
- A CD-R/CD-RW to which a session can be added can be played.

* A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

- Connect the MAIN board (CN751) and the SERVO board (CN2) with the extension cable (Part No. J-2502-076-1).



● UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

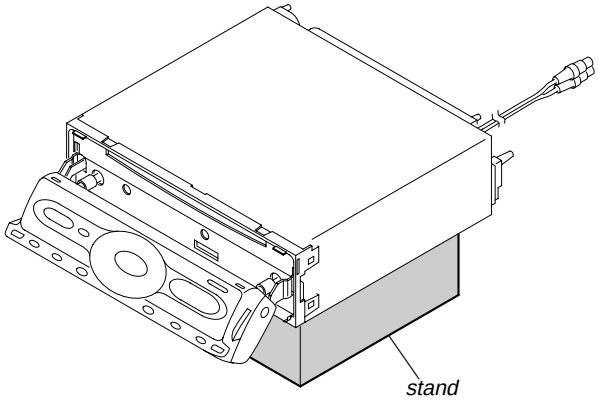
Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

NOTE FOR THE OPENING OF THE FRONT PANEL

In this set, the front panel is lowered to below the bottom face when it is opened.

When servicing the set, place it on a stand having a height of about 2 cm.



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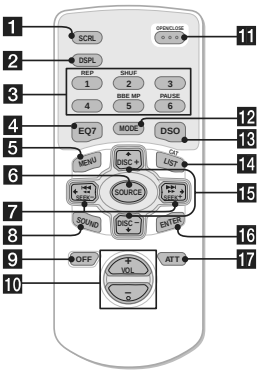
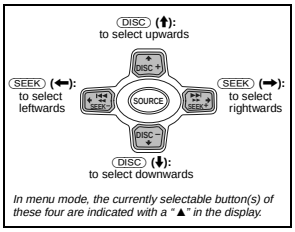
SECTION 1
GENERAL

This section is extracted from instruction manual.

Location of controls (US, Canadian Model)

Card remote commander RM-X143A




DISC (↑): to select upwards
SEEK (←): to select leftwards
SEEK (→): to select rightwards
DISC (↓): to select downwards
SOURCE
In menu mode, the currently selectable button(s) of these four are indicated with a "▲" in the display.

Refer to the pages listed for details.

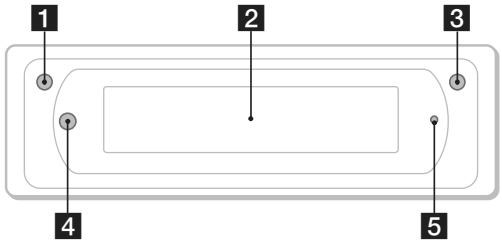
1 **SCRL (scroll) button** 12
2 **DSPL (display mode change) button** 12, 14
3 **Number buttons**
Radio:
To store stations/receive stored stations.
CD/MD:
①: **REP** 13
②: **SHUF** 13
⑥: **PAUSE***1 11
Sound:
⑤: **BBE MP***1 20
4 **EQ7 button** 22
5 **MENU button**
To display the menus.
6 **SOURCE (Power on/Radio/CD/MD*2/AUX*3) button**
To select the source.
7 **SEEK/AMS (←/→) buttons**
To skip tracks/fast-forward, reverse a track/tune in stations automatically, find a station manually/select a setting.
8 **SOUND button** 18, 20
9 **OFF (Stop/Power off) button** 11, 18, 24
10 **VOL (+/–) buttons**
To turn up or down the volume.
11 **OPEN/CLOSE button** 10, 11
12 **MODE button**
To change the operation.
13 **DSO button** 23
14 **LIST (CAT)***4 **button** 15, 18
15 **DISC (ALBUM) (↑/↓) buttons**
To receive preset stations/change the disc*5, skip albums*6/select a menu.
16 **ENTER button**
To enter a setting.
17 **ATT button** 20

Note
If the display disappears by pressing (OFF), it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

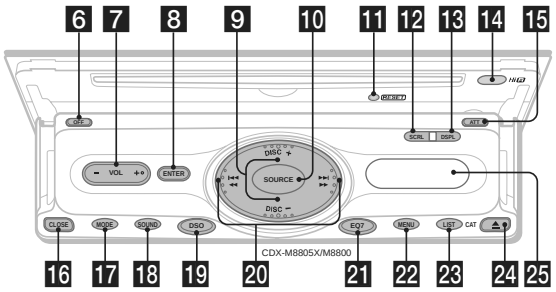
Tip
For details on how to replace the battery, see "Replacing the lithium battery" on page 25.

*1 *Available only when playing back on this unit.*
*2 *When an optional MD unit is connected.*
*3 *Available only when an optional Sony portable device is connected to AUX IN terminal of the unit. When you connect a Sony portable device and CD/MD unit(s) at the same time, use the AUX IN selector.*
*4 *The CAT button is available only when the XM tuner is connected.*
*5 *When an optional CD/MD unit is connected.*
*6 *Available only when an MP3 file is played.*

Main display side



Operation side



The buttons on the unit share the same functions as those on the card remote commander.

1 **OPEN button** 10, 11
2 **Main display window**
3 **IMAGE button** 23
4 **14** **Receptor for the card remote commander**
5 **11** **RESET button** 9
6 **OFF (Stop/Power off) button***7
7 **VOL (–/+) button**
8 **ENTER button**
9 **DISC (ALBUM) (+/–) button**
10 **SOURCE button**
12 **SCRL (scroll) button**
13 **DSPL (display mode change) button**
15 **ATT button**
16 **CLOSE (front panel close) button** 10
17 **MODE button**
18 **SOUND button**
19 **DSO button**
20 **SEEK/AMS (I◄◄ ◄◄/►►►►I) button**
21 **EQ7 button**
22 **MENU button**
23 **LIST (CAT)***8 **button**
24 **⏏ (eject) button** 11
25 **Sub display window**

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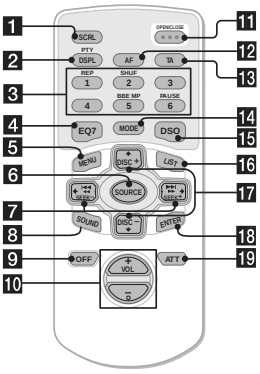
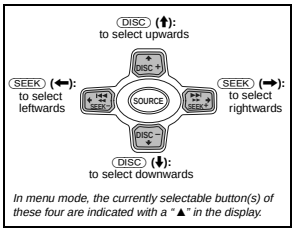
Location of controls (AEP, UK, E Model)

Card remote commander RM-X142




DISC (↑): to select upwards
SEEK (←): to select leftwards
SEEK (→): to select rightwards
DISC (↓): to select downwards
SOURCE
In menu mode, the currently selectable button(s) of these four are indicated with a "▲" in the display.

Refer to the pages listed for details.

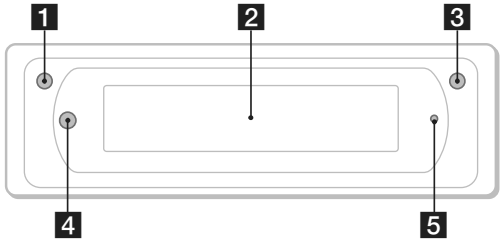
1 **SCRL (scroll) button** 12
2 **DSPL/PTY (display mode change/programme type) button** 12, 14, 17, 20
3 **Number buttons**
Radio: To store stations/receive stored stations.
CD/MD: ①: **REP** 13
②: **SHUF** 13
⑥: **PAUSE***1 11
Sound: ⑤: **BBE MP***1 23
4 **EQ7 button** 25
5 **MENU button**
To display the menus.
6 **SOURCE (Power on/Radio/CD/MD*2/AUX*3) button**
To select the source.
7 **SEEK/AMS (←/→) buttons**
To skip tracks/fast-forward, reverse a track/tune in stations automatically, find a station manually/select a setting.
8 **SOUND button** 21, 23
9 **OFF (Stop/Power off) button** 11, 21, 27
10 **VOL (+/–) buttons**
To turn up or down the volume.
11 **OPEN/CLOSE button** 10, 11
12 **AF button** 18, 19
13 **TA button** 19
14 **MODE button**
To change the operation.
15 **DSO button** 26
16 **LIST button** 15, 17
17 **DISC (ALBUM) (↑/↓) buttons**
To receive preset stations/change the disc*4, skip albums*5/select a menu.
18 **ENTER button**
To enter a setting.
19 **ATT button** 23

Note
If the display disappears by pressing (OFF), it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

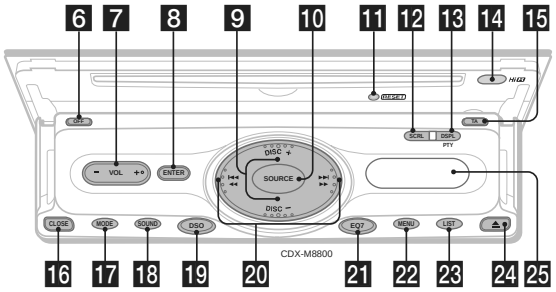
Tip
For details on how to replace the battery, see "Replacing the lithium battery" on page 29.

*1 *Available only when playing back on this unit.*
*2 *When an optional MD unit is connected.*
*3 *Available only when an optional Sony portable device is connected to AUX IN terminal of the unit. When you connect a Sony portable device and CD/MD unit(s) at the same time, use the AUX IN selector.*
*4 *When an optional CD/MD unit is connected.*
*5 *Available only when an MP3 file is played.*

Main display side



Operation side



The buttons on the unit share the same functions as those on the card remote commander.

1 **OPEN button** 10, 11
2 **Main display window**
3 **IMAGE button** 26
4 **14** **Receptor for the card remote commander**
5 **11** **RESET button** 9
6 **OFF (Stop/Power off) button***6
7 **VOL (–/+) button**
8 **ENTER button**
9 **DISC (ALBUM) (+/–) button**
10 **SOURCE button**
12 **SCRL (scroll) button**
13 **DSPL/PTY (display mode change/programme type) button**
15 **TA button**
16 **CLOSE (front panel close) button** 10
17 **MODE button**
18 **SOUND button**
19 **DSO button**
20 **SEEK/AMS (I◄◄ ◄◄/►►►►I) button**
21 **EQ7 button**
22 **MENU button**
23 **LIST button**
24 **⏏ (eject) button** 11
25 **Sub display window**

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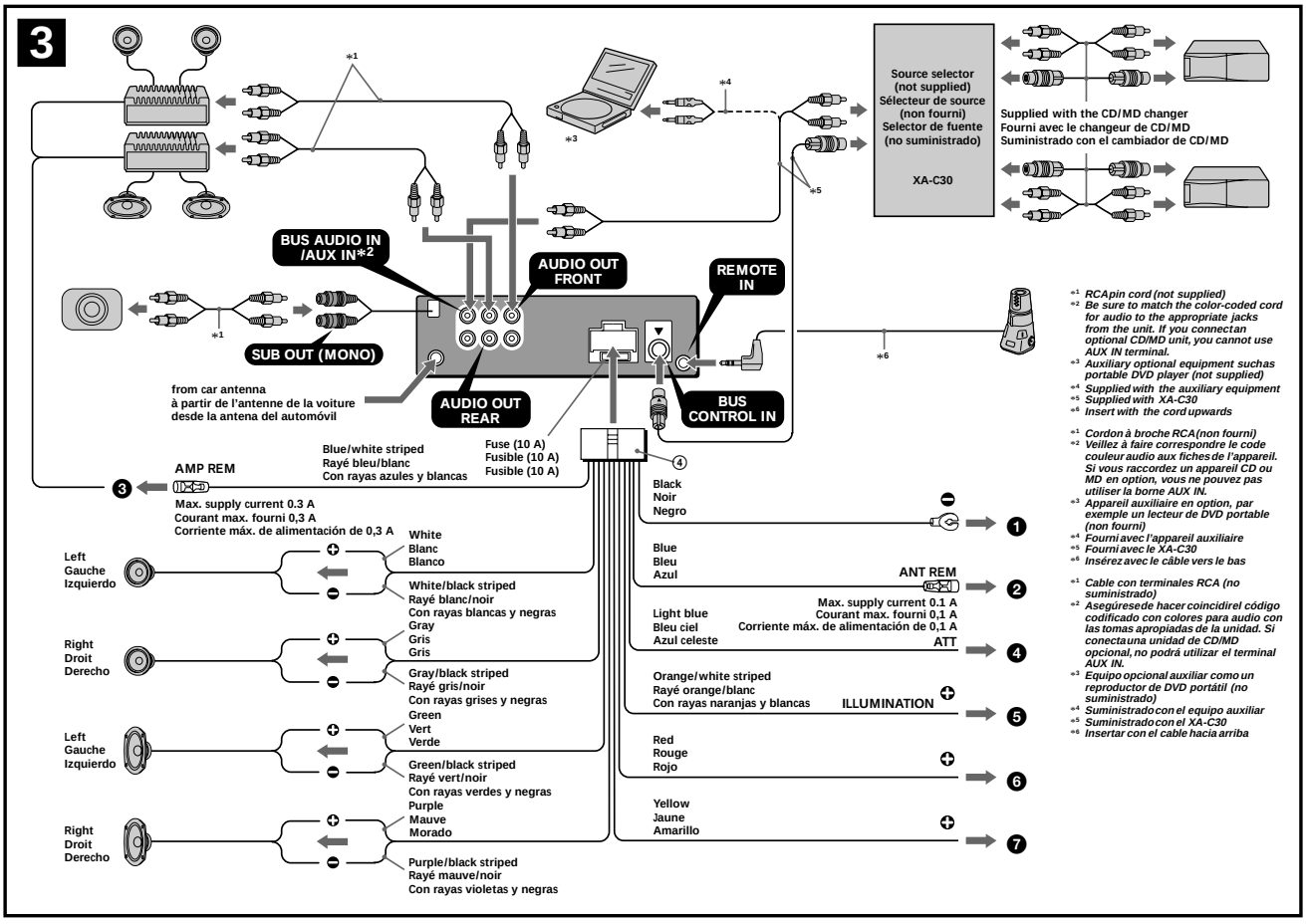
Connections (US, Canadian Model)



*1 RCA pin cord (not supplied)
*2 Be sure to match the color-coded cord for audio to the appropriate jacks from the unit. If you connect an optional CD/MD unit, you cannot use AUX IN terminal.
*3 Auxiliary optional equipment such as a portable DVD player (not supplied)
*4 Supplied with the auxiliary equipment
*5 Supplied with XA-C30
*6 Insert with the cord upwards

*1 Cordon à broche RCA (non fourni)
*2 Veillez à faire correspondre le code couleur audio aux fiches de l'appareil. Si vous raccordez un appareil CD ou MD en option, vous ne pouvez pas utiliser la borne AUX IN.
*3 Appareil auxiliaire en option, par exemple un lecteur de DVD portable (non fourni)
*4 Fourni avec l'appareil auxiliaire
*5 Fourni avec le XA-C30
*6 Insérez avec le câble vers le bas

*1 Cable con terminales RCA (no suministrado)
*2 Asegúrese de hacer coincidir el código codificado con colores para audio con las tomas apropiadas de la unidad. Si conecta una unidad de CD/MD opcional, no podrá utilizar el terminal AUX IN.
*3 Equipo opcional auxiliar como un reproductor de DVD portátil (no suministrado)
*4 Suministrado con el equipo auxiliar
*5 Suministrado con el XA-C30
*6 Insertar con el cable hacia arriba

Connection diagram (3)

❶ **To a metal surface of the car**
First connect the black ground lead, then connect the yellow and red power input leads.

❷ **To the power antenna control lead or power supply lead of antenna booster amplifier**
Notes
- *If it is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.*
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❸ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ **To the interface cable of a car telephone**

❺ **To a car's illumination signal**
Be sure to connect the black ground lead to a metal surface of the car first.

❻ **To the +12 V power terminal which is energized in the accessory position of the ignition key switch**
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.*
  Be sure to connect the black ground lead to a metal surface of the car first.
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❼ **To the +12 V power terminal which is energized at all times**
Be sure to connect the black ground lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.*
- *A power antenna without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "Failure" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Schéma de raccordement (3)

❶ **À un point métallique de la voiture**
Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.

❷ **Vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne**
Remarques
- *Il n'est pas nécessaire de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les fils de commande et d'alimentation ».*

❸ **Au niveau du AMP REMOTE IN de l'amplificateur de puissance en option**
Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.

❹ **Vers le cordon de liaison d'un téléphone de voiture**

❺ **Vers le connecteur du signal d'éclairage de la voiture**
Raccordez d'abord le fil de masse noir à un point métallique du véhicule.

❻ **À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires**
Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le fil de masse noir à un point métallique du véhicule.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les fils de commande et d'alimentation ».*

❼ **À la borne +12 V qui est alimentée en permanence**
Raccordez d'abord le fil de masse noir à un point métallique du véhicule.

Remarques sur les fils de commande et d'alimentation
- *Le fil de commande de l'antenne électrique (bleu) fournit une alimentation de + 12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour garantir la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité électrique adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes des haut-parleurs droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de masse de cet appareil à la borne négative (–) de l'enceinte.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les haut-parleurs et l'amplificateur ne sont pas raccordés correctement, le message « Failure » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs et l'amplificateur sont bien raccordés.

Diagrama de conexión (3)

❶ **A una superficie metálica del automóvil**
Realice primero la conexión a masa negra y después las conexiones de entrada de alimentación amarilla y roja.

❷ **Al cable de control de la antena motorizada o a la conexión de fuente de alimentación del amplificador de señal de la antena**
Notas
- *Si no se dispone de antena motorizada ni de amplificador de señal de la antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ **Para conectar a AMP REMOTE IN del amplificador de potencia opcional**
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.

❹ **Al cable de interfaz de un teléfono para automóvil**

❺ **A una señal de iluminación del automóvil**
Asegúrese de realizar primero la conexión a masa negra a una superficie metálica del automóvil.

❻ **Al terminal de alimentación de +12 V que recibe energía en la posición de accesorio del interruptor de la llave de encendido**
Notas
- *Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.*
  Asegúrese de realizar primero la conexión a masa negra a una superficie metálica del automóvil.
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero/lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❼ **Al terminal de alimentación de +12 V que recibe energía sin interrupción**
Asegúrese de realizar primero la conexión a masa negra a una superficie metálica del automóvil.

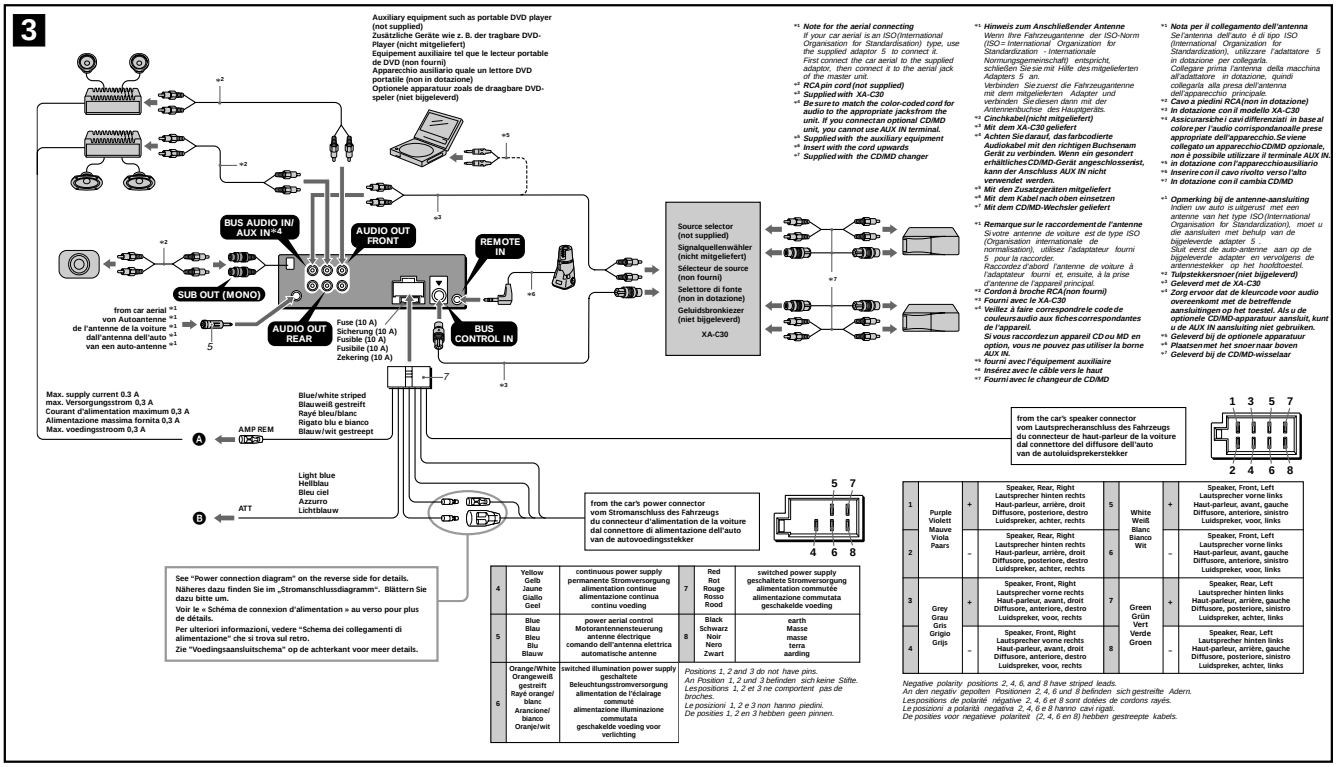
Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de + 12V cuando conecte la alimentación del sintonizador.*
- *Si el automóvil dispone de una antena de FM/AM incorporada en el cristal trasero o lateral, conecte el cable de control de antena motorizada (azul) o a la conexión de entrada de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de señal de la antena existente. Para obtener más información, consulte a su distribuidor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si realiza la conexión de entrada de alimentación amarilla, el circuito de la memoria recibirá siempre alimentación, aunque apague la llave de encendido.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ω con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No realice la conexión a masa de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si su unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz y el amplificador no están conectados correctamente, aparecerá " Failure " en la pantalla. Si es así, compruebe la conexión de ambos dispositivos.

Connections (AEP, UK Model)


3
Auxiliary equipment such as portable DVD player (not supplied)
Zusätzliche Geräte wie z. B. der tragbare DVD-Player (nicht mitgeliefert)
Equipement auxiliaire tel que le lecteur portable de DVD (non fourni)
Apparecchio ausiliario quale un lettore DVD portatile (non in dotazione)
Optionele apparatuur zoals de draagbare DVD-speler (niet bijgeleverd)
BUS AUDIO IN/ AUX IN*4
AUDIO OUT FRONT
REMOTE IN
SUB OUT (MONO)
AUDIO OUT REAR
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Fusibile (10 A)
Zekering (10 A)
BUS CONTROL IN
from car aerial *1
von Autoantenne *1
de l'antenne de la voiture *1
dall'antenna dell'auto *1
van een auto-antenne *1
Source selector (not supplied)
Signalquellenwähler (nicht mitgeliefert)
Sélecteur de source (non fourni)
Selettore di fonte (non in dotazione)
Geluidsbronkiezer (niet bijgeleverd)
XA-C30
Max. supply current 0.3 A
max. Versorgungsstrom 0,3 A
Courant d'alimentation maximum 0,3 A
Alimentazione massima fornita 0,3 A
Max. voedingsstroom 0,3 A
Blue/white striped
Blauweiß gestreift
Rayé bleu/blanc
Rigato blu e bianco
Blauw/wit gestreept
AMP REM
Light blue
Hellblau
Bleu ciel
Azzurro
Lichtblauw
ATT
from the car's power connector
vom Stromanschluss des Fahrzeugs
du connecteur d'alimentation de la voiture
dal connettore di alimentazione dell'auto
van de autovoedingsstekker
from the car's speaker connector
vom Lautsprecheranschluss des Fahrzeugs
du connecteur de haut-parleur de la voiture
dal connettore del diffusore dell'auto
van de autoluidsprekerstekker
See "Power connection diagram" on the reverse side for details.
Näheres dazu finden Sie im „Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Voir le « Schéma de connexion d'alimentation » au verso pour plus de détails.
Per ulteriori informazioni, vedere "Schema dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.

*1 **Note for the aerial connecting***
If your car aerial is an ISO(International Organisation for Standardisation) type, use the supplied adaptor 5 to connect it. First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
*2 **RCA pin cord (not supplied)***
*3 **Supplied with XA-C30***
*4 **Be sure to match the color-coded cord for audio to the appropriate jacks from the unit. If you connectan optional CD/MD unit, you cannot use AUX IN terminal.***
*5 **Supplied with the auxiliary equipment***
*6 **Insert with the cord upwards***
*7 **Supplied with the CD/MD changer***

*1 **Hinweis zum Anschließender Antenne***
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO= International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mit Hilfe des mitgelieferten Adapters 5 an. Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
*2 **Cinchkabel(nicht mitgeliefert)***
*3 **Mit dem XA-C30 geliefert***
*4 **Achten Sie darauf, das farbcodierte Audiokabel mit den richtigen Buchsenam Gerät zu verbinden. Wenn ein gesondert erhältliches CD/MD-Gerät angeschlossenist, kann der Anschluss AUX IN nicht verwendet werden.***
*5 **Mit den Zusatzgeräten mitgeliefert***
*6 **Mit dem Kabel nach oben einsetzen***
*7 **Mit dem CD/MD-Wechsler geliefert***

*1 **Remarque sur le raccordement de l'antenne***
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni 5 pour la raccorder.
Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
*2 **Cordon à broche RCA(non fourni)***
*3 **Fourni avec le XA-C30***
*4 **Veillez à faire correspondrele code de couleursaudio aux fiches correspondantes de l'appareil.***
Si vous raccordez un appareil CD ou MD en option, vous ne pouvez pas utiliser la borne AUX IN.
*5 **fourni avec l'équipement auxiliaire***
*6 **Insérez avec le câble vers le haut***
*7 **Fourni avec le changeur de CD/MD***

*1 **Nota per il collegamento dell'antenna***
Se l'antenna dell'auto è di tipo ISO (International Organization for Standardization), utilizzare l'adattatore 5 in dotazione per collegarla.
Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
*2 **Cavo a piedini RCA(non in dotazione)***
*3 **In dotazione con il modello XA-C30***
*4 **Assicurarsiche i cavi differenziati in base al colore per l'audio corrispondanoalle prese appropriate dell'apparecchio.Se viene collegato un apparecchio CD/MD opzionale, non è possibile utilizzare il terminale AUX IN.***
*5 **in dotazione con l'apparecchio ausiliario***
*6 **Inserire con il cavo rivolto verso l'alto***
*7 **In dotazione con il cambia CD/MD***

*1 **Opmerking bij de antenne-aansluiting***
Indien uw auto is uitgerust met een antenne van het type ISO(International Organisation for Standardization), moet u die aansluiten met behulp van de bijgeleverde adapter 5 .
Sluit eerst de auto-antenne aan op de bijgeleverde adapter en vervolgens de antenneaansluiting op het hoofdtoestel.
*2 **Tulpstekkersnoer(niet bijgeleverd)***
*3 **Geleverd met de XA-C30***
*4 **Zorg ervoor dat de kleurcode voor audio overeenkomt met de betreffende aansluitingen op het toestel. Als u de optionele CD/MD-apparatuur aansluit, kunt u de AUX IN aansluiting niet gebruiken.***
*5 **Geleverd bij de optionele apparatuur***
*6 **Plaatsen met het snoer naar boven***
*7 **Geleverd bij de CD/MD-wisselaar***

1	Purple Violett Mauve Viola Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		–	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		–	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Grey Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		–	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		–	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

Negative polarity positions 2, 4, 6, and 8 have striped leads.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.

4	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	
5	Blue Blau Bleu Blu Blauw	power aerial control Motorantennensteuerung antenne électrique comando dell'antenna elettrica automatische antenne	
6	Orange/White Orangeweiß gestreift Rayé orange/ blanc Arancione/ bianco Oranje/wit	switched illumination power supply geschaltete Beleuchtungsstromversorgung alimentation de l'éclairage commuté alimentazione illuminazione commutata geschakelde voeding voor verlichting	
7	Red Rot Rouge Rosso Rood	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding	
8	Black Schwarz Noir Nero Zwart	earth Masse masse terra aarding	

Positions 1, 2 and 3 do not have pins.
An Position 1, 2 und 3 befinden sich keine Stifte.
Les positions 1, 2 et 3 ne comportent pas de broches.
Le posizioni 1, 2 e 3 non hanno piedini.
De posities 1, 2 en 3 hebben geen pinnen.

Connection diagram (3)

A To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.
B To the interface cable of a car telephone

Warning
If you have a power aerial without a relay box, connecting this unit with the supplied power connecting lead 6 may damage the aerial.

Notes on the control leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner, or when you activate the AF (Alternative Frequency) or TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory/power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis,or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "Failure" appears in the display. In this case,make sure the speaker and amplifier are connected correctly.

Anschlussdiagramm (3)

A An AMP REMOTE IN des gesondert erhältlichen Endverstärkers
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.
B An Schnittstellenkabel eines Autotelefons

Warnung
Wenn Sie eine Motorantenne ohne Relaiskästchenverwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel 6 die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten UKW/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Eskann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Hinweis zum Anschließen
Wenn Lautsprecher und Verstärker nicht richtig angeschlossen sind, erscheint „Failure" im Display. Vergewissern Sie sich in diesem Fall, dass Lautsprecher und Verstärker richtig angeschlossen sind.

Schémas de connexion (3)

A Au niveau du AMP REMOTE IN d'un amplificateur de puissance facultatif
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.
B Vers le cordon de liaison d'un téléphone de voiture

Avertissement
Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni 6 risque d'endommager l'antenne.

Remarques sur les fils de commande
- *Le fil de commande (bleu) fournit du courant continu de +12 V lorsque vous mettez le tuner sous tension ou lorsque vous activez la fonction AF (fréquence alternative) ou TA (informations circulation).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW (PO)/ LW (GO) intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) au borner de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Connexion pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur la connexion des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas raccorder le câble de masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes acoustiques actives (avec amplificateurs intégrés) aux bornes d'enceinte de cet appareil, pour éviter d'endommager l'appareil. Veiller à raccorder des enceintes passives uniquement.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil dispose d'un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les enceintes et l'amplificateur ne sont pas raccordés correctement, le message « Failure » s'affiche. Dans ce cas, assurez-vous que les enceintes et l'amplificateur sont raccordés correctement.

Schema di collegamento (3)

A A AMP REMOTE IN di un amplificatore di potenza opzionale
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causarne danni all'apparecchio.
B Al cavo di interfaccia di un telefono per auto

Avvertenza
Quando si collega l'apparecchio con il cavo di alimentazione in dotazione 6 , si potrebbe danneggiare l'antenna elettrica se questa è priva di scatola a relè.

Note sui cavi di controllo
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore oppure la funzione TA (notiziario sul traffico) o AF (frequenza alternativa).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione accessori al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venire danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) dei diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Nota sui collegamenti
Se l'amplificatore e il diffusore non sono collegati correttamente, "Failure" viene visualizzato nel display. In tal caso, accertarsi che l'amplificatore e il diffusore siano collegati correttamente.

Aansluitschema (3)

A Naar AMP REMOTE IN van een optionele vermogensversterker
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het apparaat worden beschadigd.
B Naar het interface-snoer van een autotelefoon

Opgelet
Indien u een elektrische antenne hebt zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer 6 de antenne beschadigen.

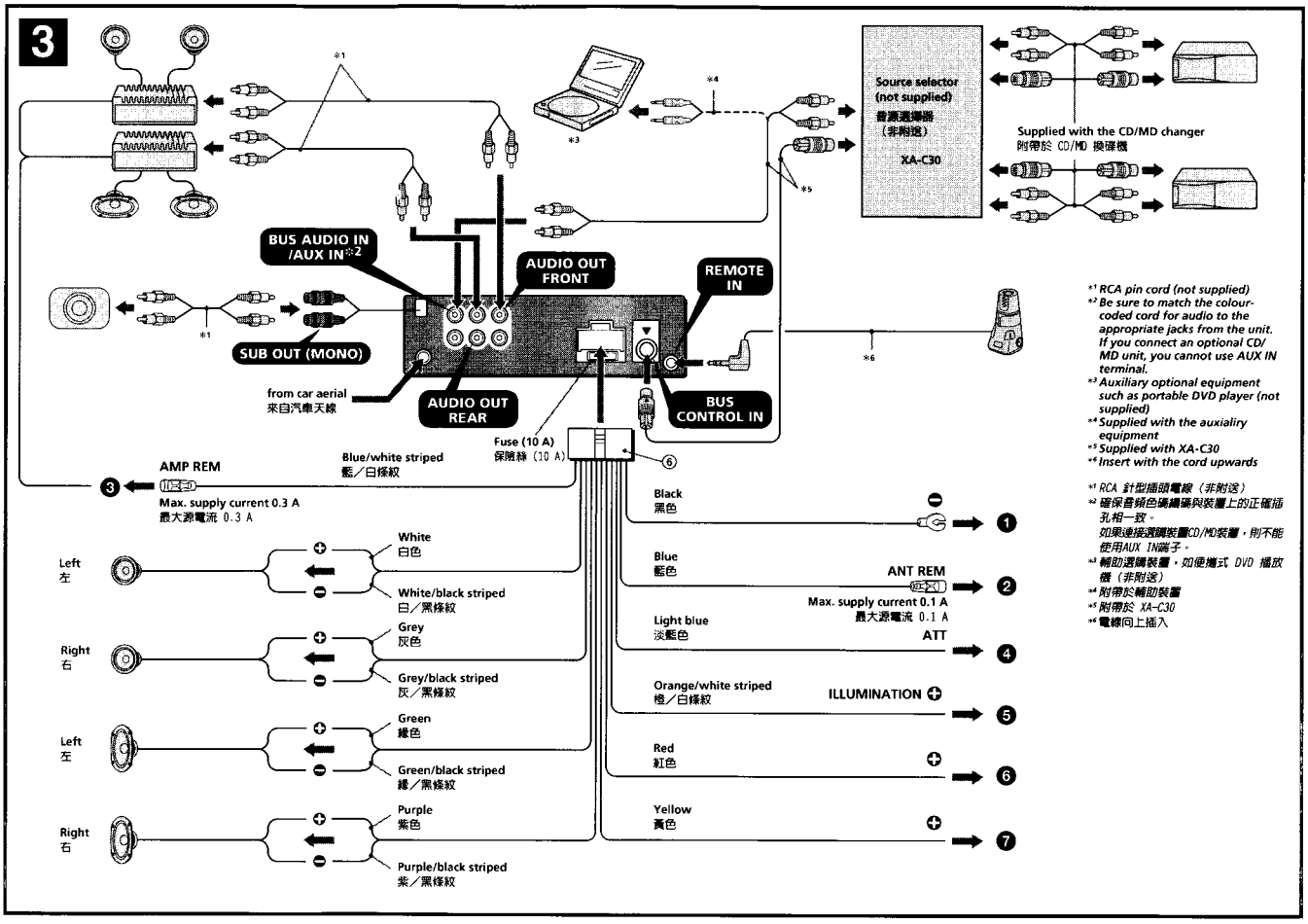
Opmerkingen betreffende de aansluitsnoeren
- *De antennecontroldingskabel (blauw) levert +12 V gelijkstroom wanneer u de tuner inschakelt of de AF (Alternative Frequency) of TA (Traffic Announcement) functie activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/zijruit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antennevesterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaiskast te gebruiken.*

Instandhouden van het geheugen
Zolang de gele voedingskabel is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassisvan de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Verbind de de aardingskabel van dit apparaat niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van het apparaat. Sluit dus alléjd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (-) draad is voor de rechter en linker luidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

Opmerking over aansluiten
Als de luidspreker en versterker niet correct zijn aangesloten, wordt "Failure" in het display weergegeven. In dit geval moet u zorgen dat de luidspreker en versterker correct zijn aangesloten.

Connections (E Model)



*1 RCA pin cord (not supplied)
*2 Be sure to match the colour-coded cord for audio to the appropriate jacks from the unit. If you connect an optional CD/MD unit, you cannot use AUX IN terminal.
*3 Auxiliary optional equipment such as portable DVD player (not supplied)
*4 Supplied with the auxiliary equipment
*5 Supplied with XA-C30
*6 Insert with the cord upwards

*1 RCA 針型插頭電線（非附送）
*2 確保音頻色碼編碼與裝置上的正確插孔相一致。
如果連接選購裝置CD/MD裝置，則不能使用AUX IN端子。
*3 輔助選購裝置，如便攜式 DVD 播放機（非附送）
*4 附帶於輔助裝置
*5 附帶於 XA-C30
*6 電線向上插入

Connection diagram (3)

❶ **To a metal surface of the car**
First connect the black earth lead, then connect the yellow and red power input leads.

❷ **To the power aerial control lead or power supply lead of aerial booster amplifier**
Notes
- *It is not necessary to connect this lead if there is no power aerial or aerial booster, or with a manually-operated telescopic aerial.*
- *When your car has a built-in FM/MW/LW aerial in the rearlside glass, see "Notes on the control and power supply leads."*

❸ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ **To the interface cable of a car telephone**

❺ **To a car's illumination signal**
Be sure to connect the black earth lead to a metal surface of the car first.

❻ **To the +12 V power terminal which is energised in the accessory position of the ignition key switch**
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energised at all times.*
  Be sure to connect the black earth lead to a metal surface of the car first.
- *When your car has a built-in FM/MW/LW aerial in the rearlside glass, see "Notes on the control and power supply leads."*

❼ **To the +12 V power terminal which is energised at all times**
Be sure to connect the black earth lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rearlside glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "Failure" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

線路連接圖（3）

❶ **連接至汽車的金屬表面**
首先連接黑色接地導線，然後再連接黃色和紅色電源輸入導線。

❷ **連接至電動天線控制導線或天線升壓放大器的電源導線**
註
- *如無電動天線，天線升壓器，或有手動套管式天線，便不須連接此導線。*
- *您汽車的後／側玻璃窗中如果有內置 FM/MW/LW 天線，即請參看 "控制線和電源線須知"。*

❸ **連接至選購的功率放大器的 AMP REMOTE IN（放大器遙控輸入）**
本連接僅用於放大器。連接任何其它系統可能會損壞本機。

❹ **連接至汽車電話的接口電纜**

❺ **至汽車照明訊號**
務請首先將黑色接地導線連接至汽車的金屬表面。

❻ **連接至在點火鑰匙開關的附件位置上通電的 +12 V 電源端子**
註
- *若沒有附件位置，即請連接至始終通電的 +12 V 電源（電池）端子。*
  必須首先將黑色接地導線連接至汽車的金屬表面。
- *您汽車的後／側玻璃窗中如果有內置 FM/MW/LW 天線，即請參看 "控制線和電源線須知"。*

❼ **連接至始終通電的 +12 V 電源端子**
必須首先將黑色接地導線連接至汽車的金屬表面。

控制線和電源線須知
- *當您打開調諧器或啓動 AF（變換頻率）或 TA（交通公告）功能時，電源天線控制導線（藍色）提供 +12 V dc 流電。*
- *若您的汽車後／側玻璃窗上有內置 FM/MW/LW 天線，須將電動天線控制導線（藍色）或輔助電源輸入導線（紅色）連接到現有天線升壓器上的電源端子上。詳細內容請向銷售商詢問。*
- *本機不能使用不具備繼電器盒的電動天線。*

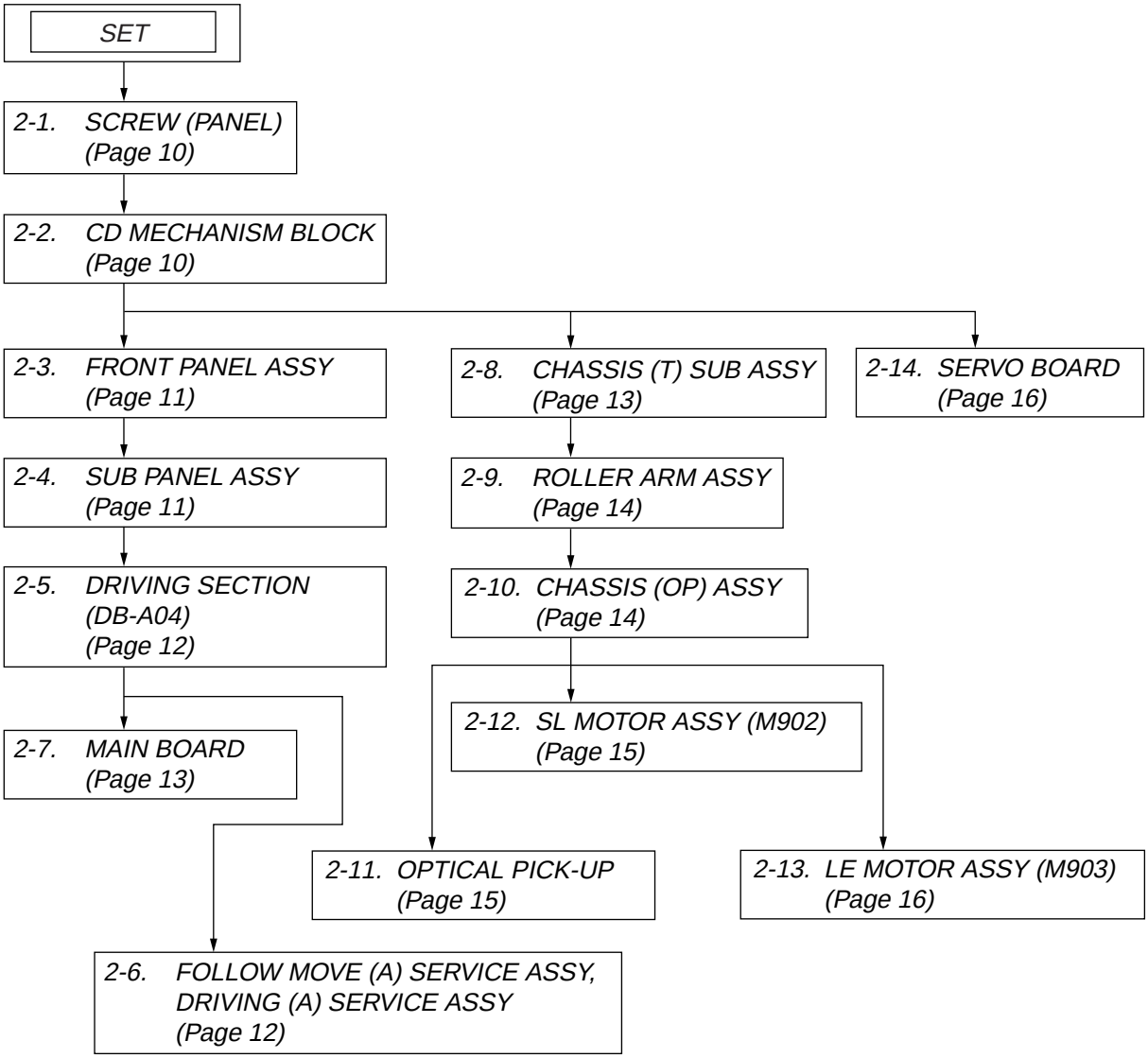
保持記憶的線路連接法
當連接好黃色電源輸入導線時，即使汽車發動機點火開關關閉，電源仍將對記憶電路供電。

連接揚聲器時的注意事項
- *連接揚聲器電線以前，請先關閉本機電源。*
- *使用阻抗爲 4–8 Ω 且具有足夠功率處理容量的揚聲器，以免損壞揚聲器。*
- *不要將揚聲器端子連接到車身上，或將右揚聲器端子與左揚聲器端子相連接。*
- *切勿將本機的接地導線連接至揚聲器的負(–)接線端。*
- *揚聲器不可並聯連接。*
- *請僅連接無源揚聲器。若將有源揚聲器（帶內置放大器）連接到揚聲器端子上會損壞本機。*
- *若本裝置使用左、右揚聲器的共用負極(–)導線，爲了避免故障，切勿使用已安裝在汽車內的內置揚聲器導線。*
- *請勿將本裝置揚聲器導線相互連接。*

有關連接注意事項
如果未正確連接揚聲器和放大器，則顯示器上會出現 "Failure"。此時，請正確連接揚聲器和放大器。

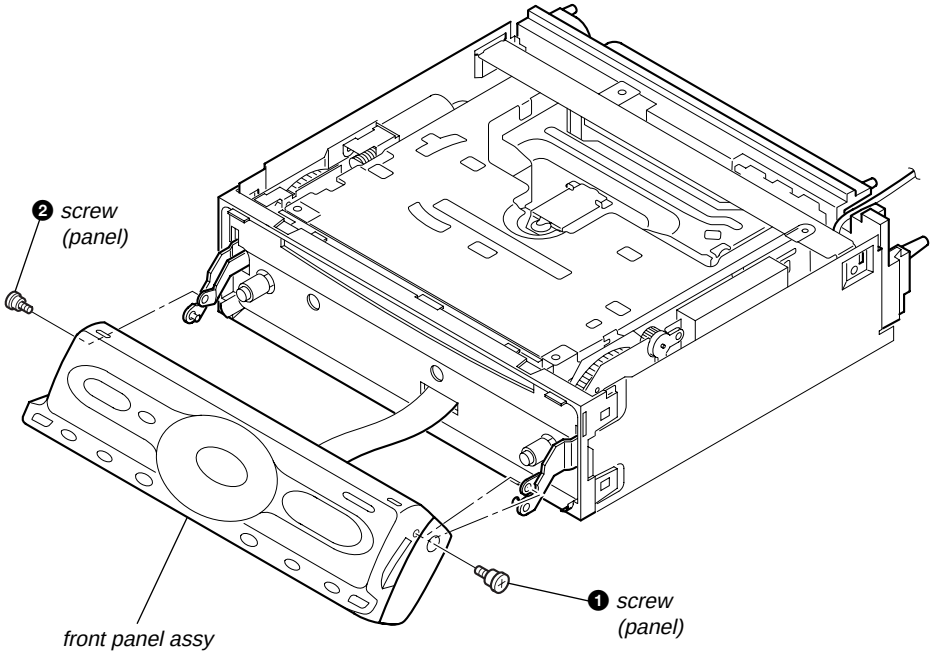
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

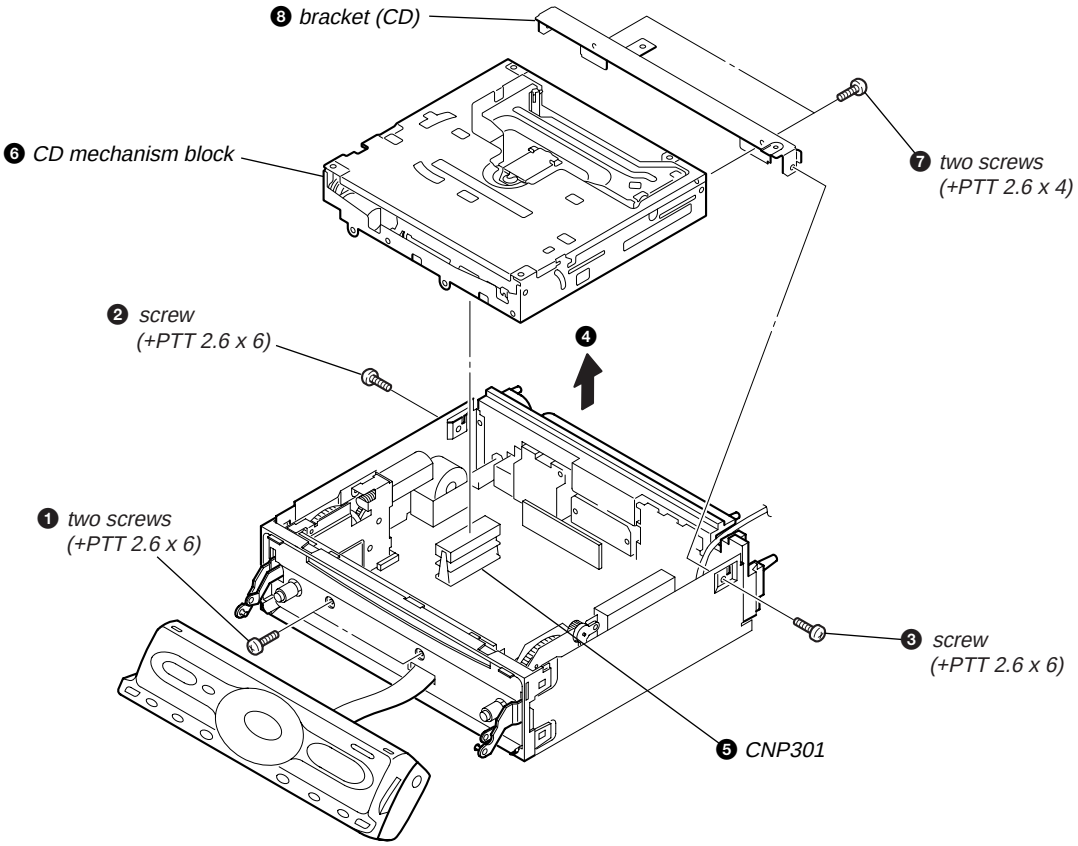

SET
2-1. SCREW (PANEL) (Page 10)
2-2. CD MECHANISM BLOCK (Page 10)
2-3. FRONT PANEL ASSY (Page 11)
2-4. SUB PANEL ASSY (Page 11)
2-5. DRIVING SECTION (DB-A04) (Page 12)
2-7. MAIN BOARD (Page 13)
2-6. FOLLOW MOVE (A) SERVICE ASSY, DRIVING (A) SERVICE ASSY (Page 12)
2-8. CHASSIS (T) SUB ASSY (Page 13)
2-9. ROLLER ARM ASSY (Page 14)
2-10. CHASSIS (OP) ASSY (Page 14)
2-12. SL MOTOR ASSY (M902) (Page 15)
2-11. OPTICAL PICK-UP (Page 15)
2-13. LE MOTOR ASSY (M903) (Page 16)
2-14. SERVO BOARD (Page 16)

Note : Follow the disassembly procedure in the numerical order given.

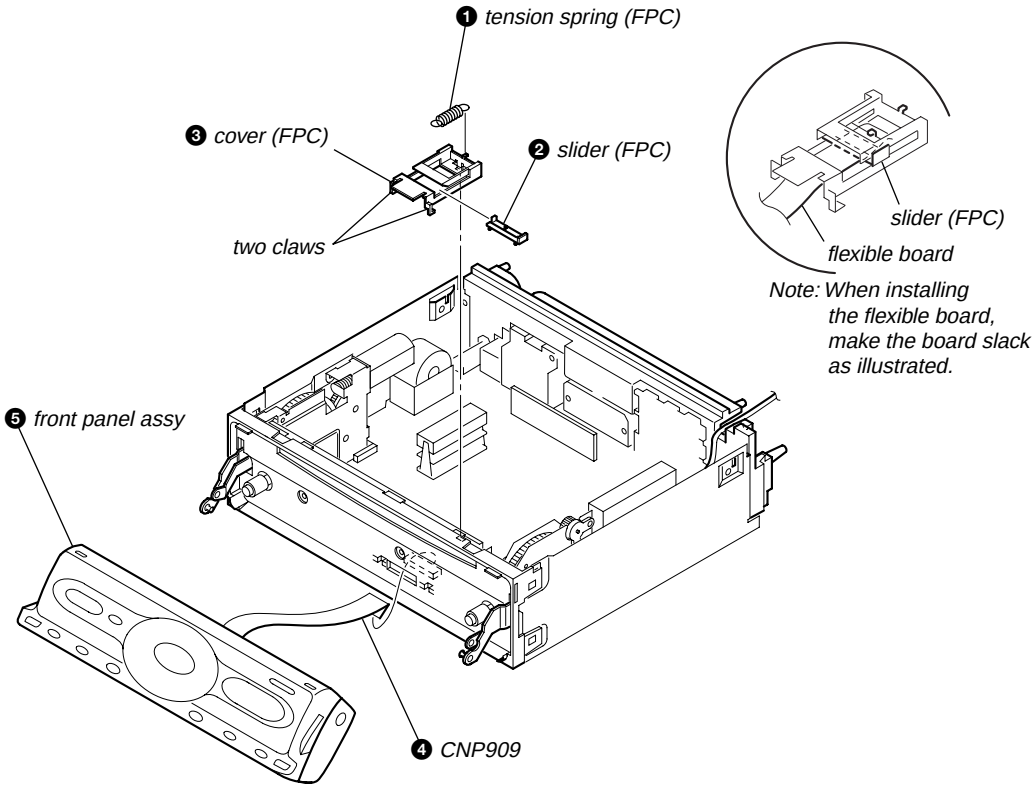
2-1. SCREW (PANEL)



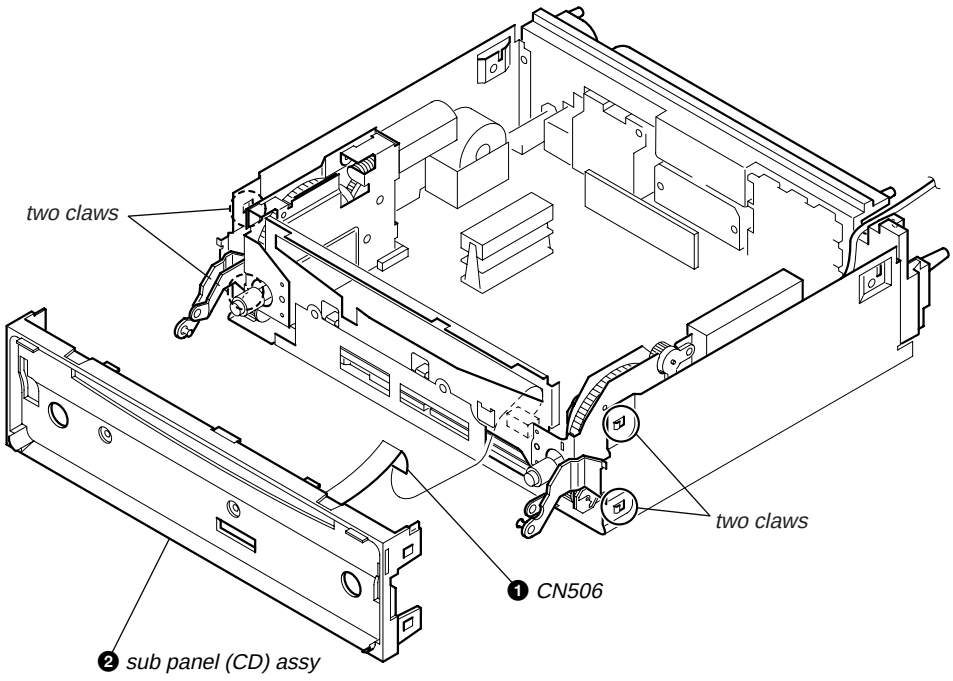
2-2. CD MECHANISM BLOCK



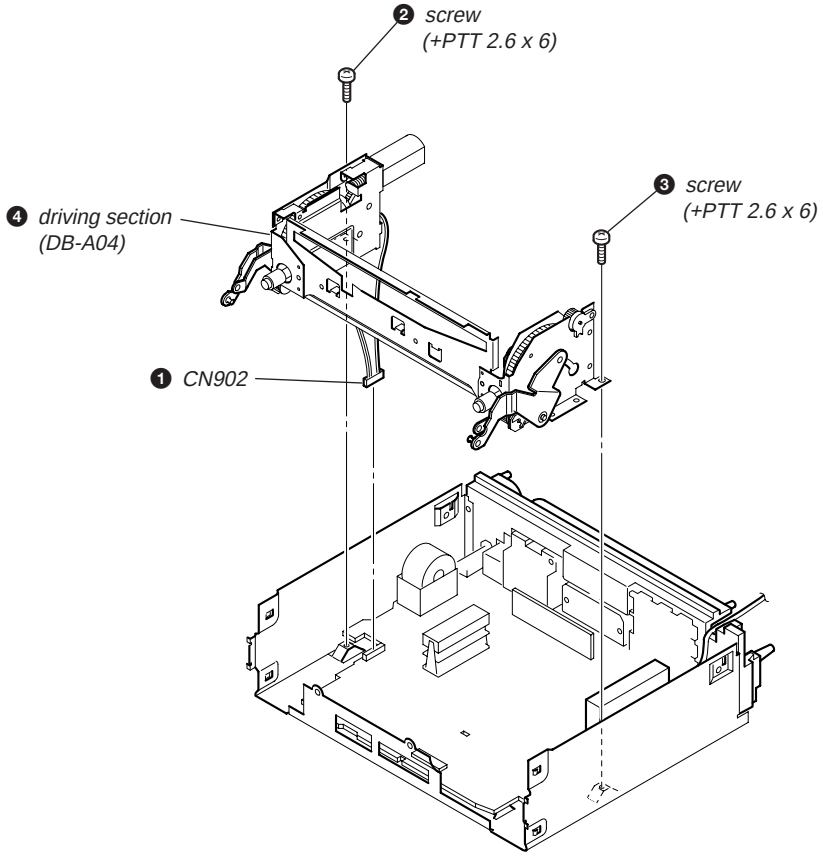
2-3. FRONT PANEL ASSY



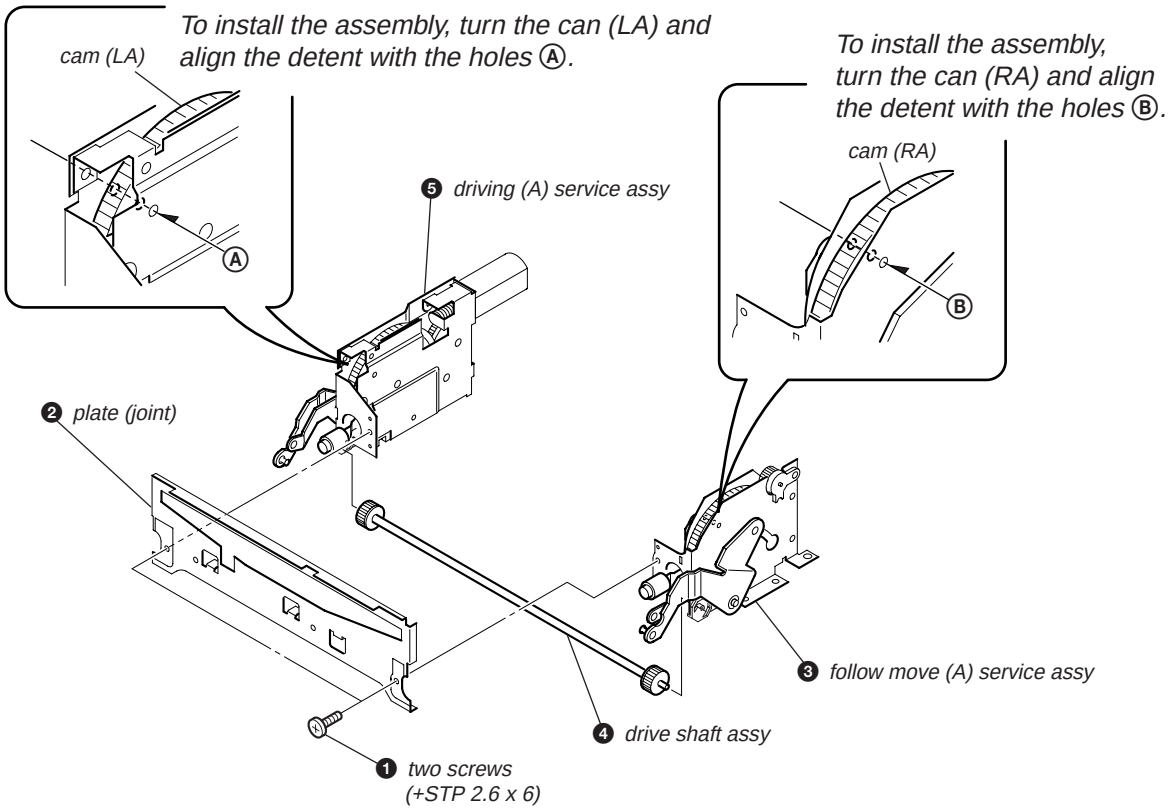
2-4. SUB PANEL ASSY



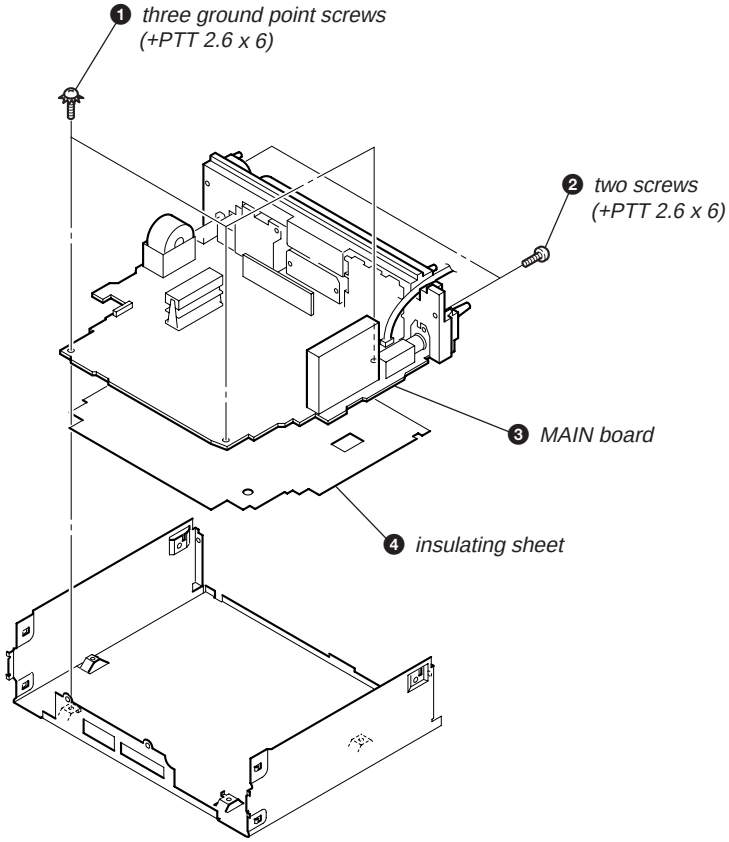
2-5. DRIVING SECTION (DB-A04)



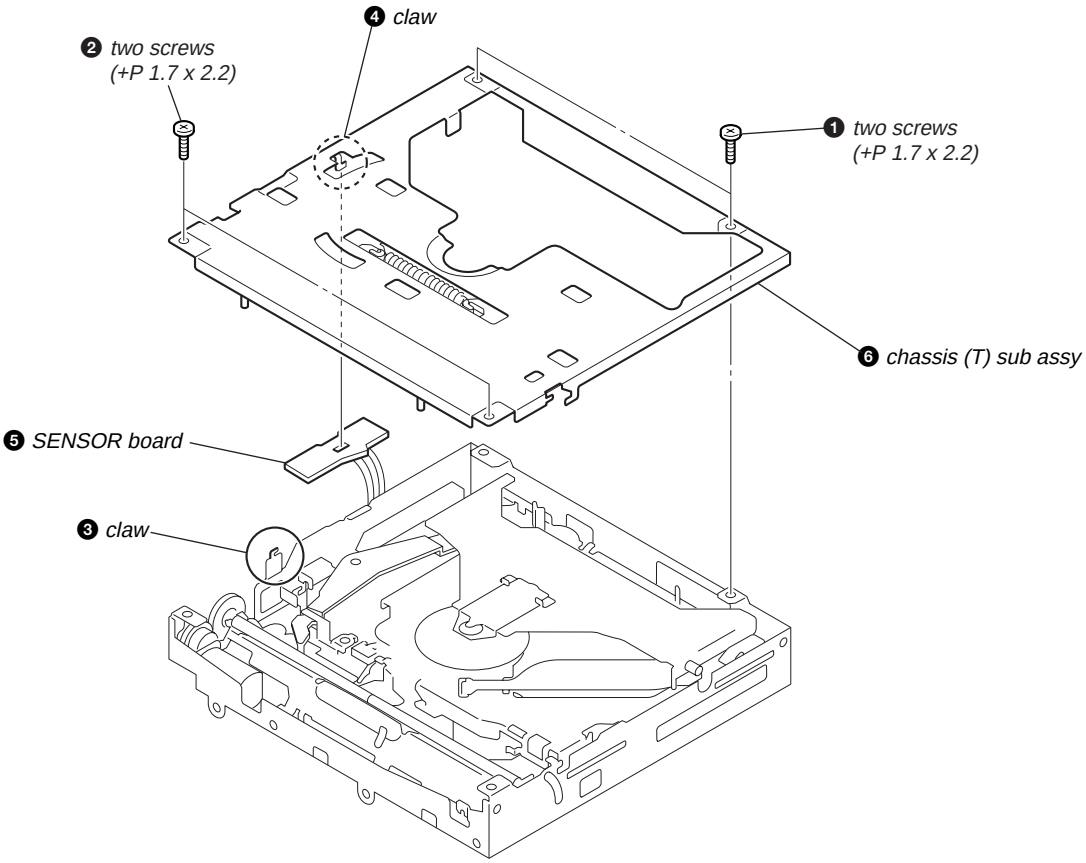
2-6. FOLLOW MOVE (A) SERVICE ASSY, DRIVING (A) SERVICE ASSY


To install the assembly, turn the can (LA) and align the detent with the holes Ⓐ.
cam (LA)
Ⓐ
To install the assembly, turn the can (RA) and align the detent with the holes Ⓑ.
cam (RA)
Ⓑ
❺ driving (A) service assy
❷ plate (joint)
❸ follow move (A) service assy
❹ drive shaft assy
❶ two screws
(+STP 2.6 x 6)

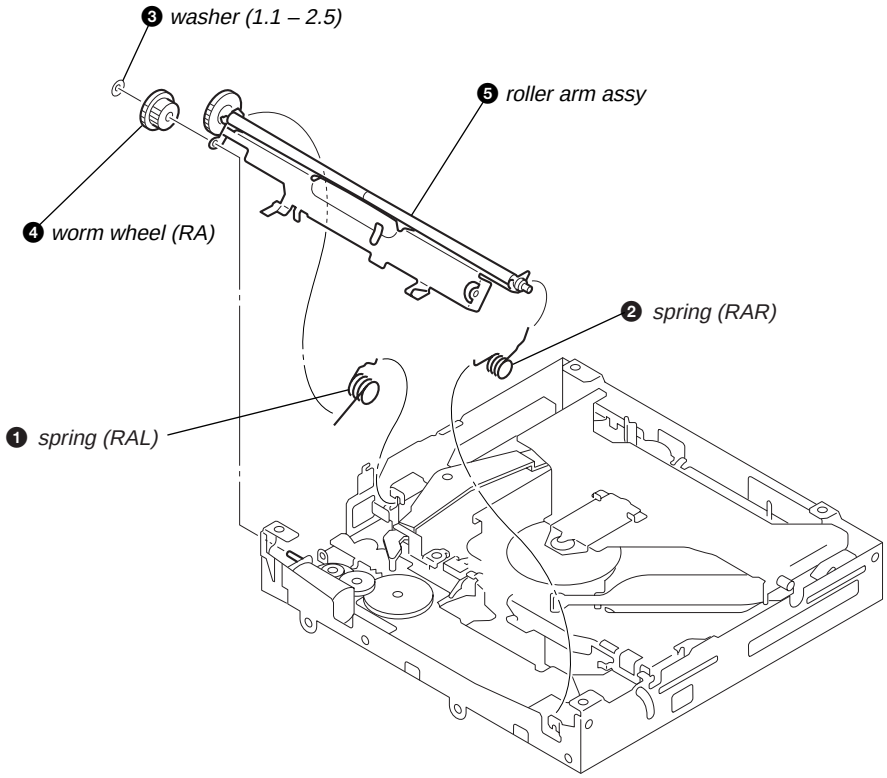
2-7. MAIN BOARD



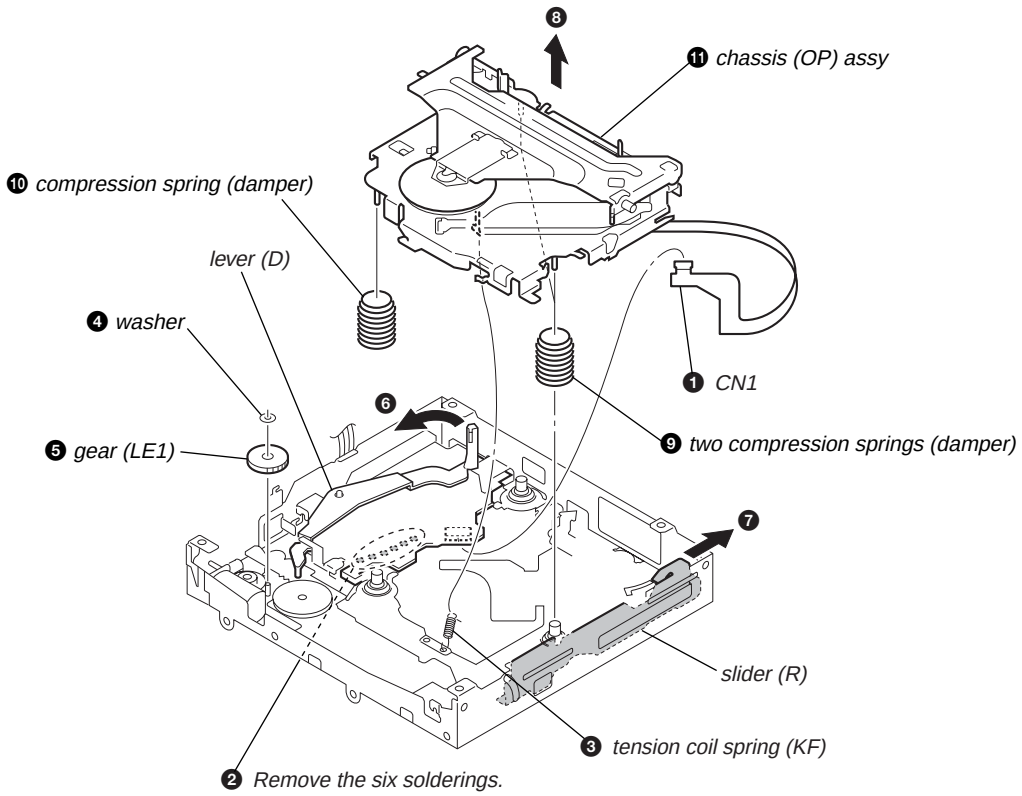
2-8. CHASSIS (T) SUB ASSY



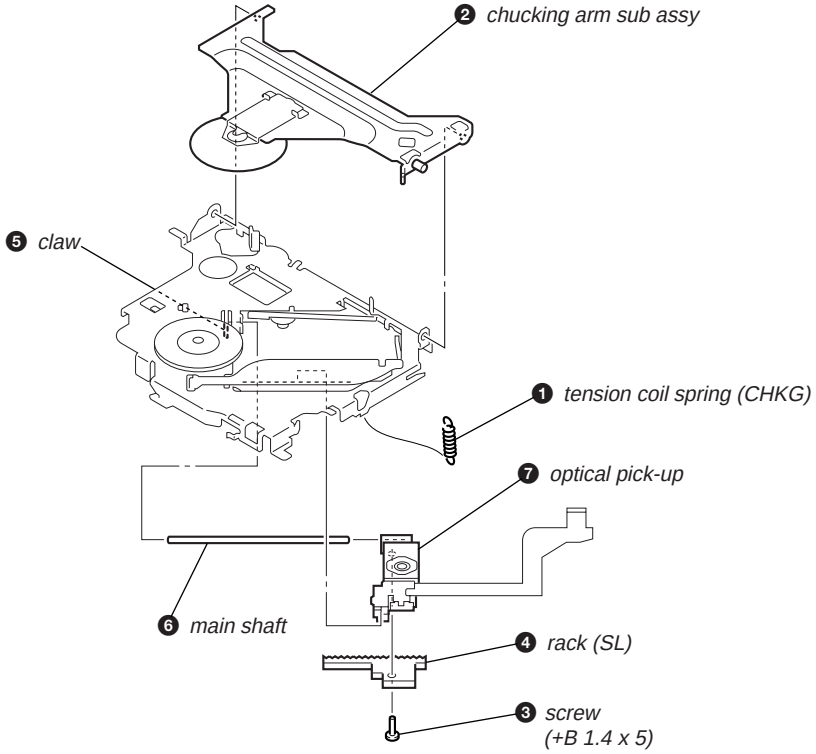
2-9. ROLLER ARM ASSY



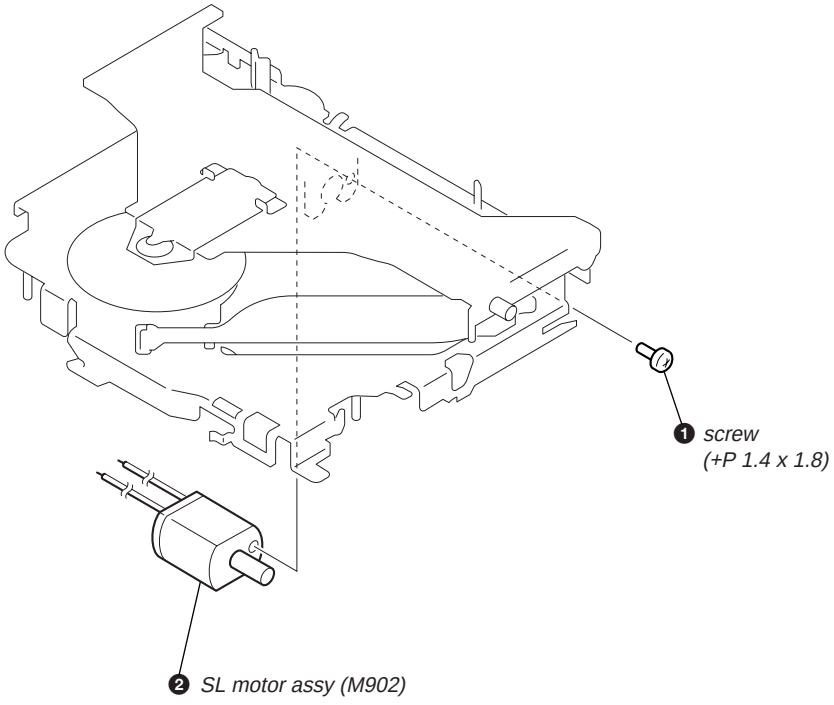
2-10. CHASSIS (OP) ASSY



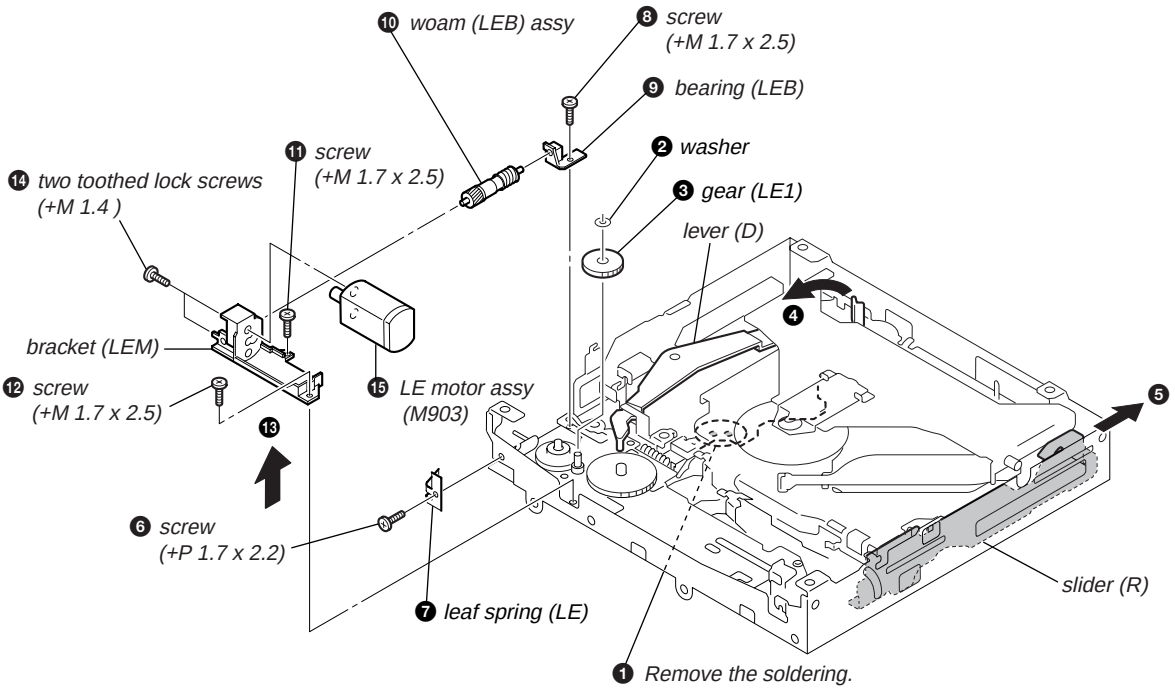
2-11. OPTICAL PICK-UP



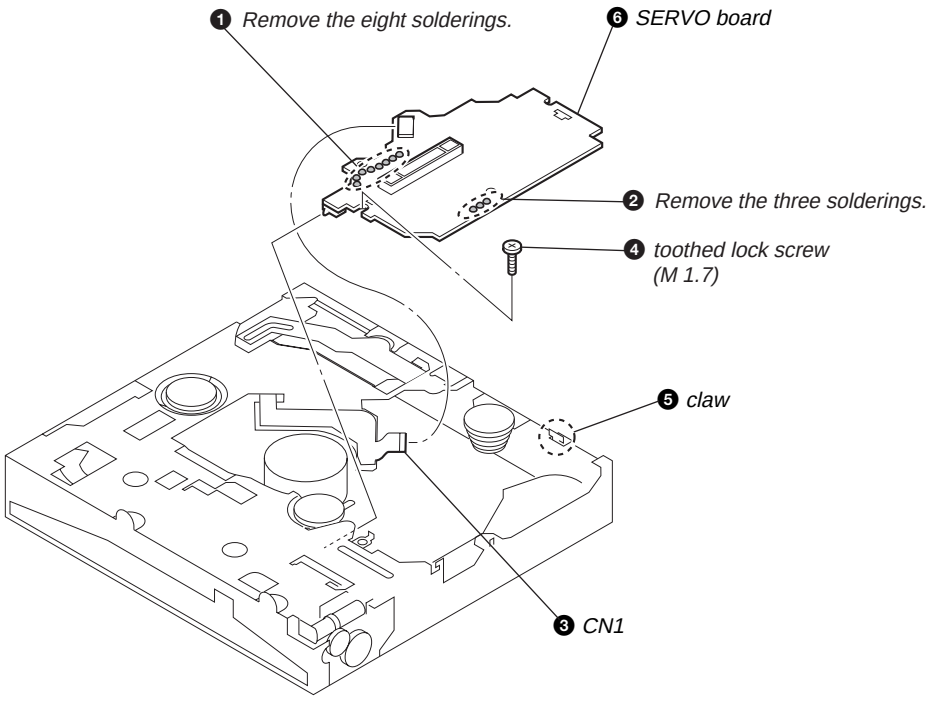
2-12. SL MOTOR ASSY (M902)



2-13. LE MOTOR ASSY (M903)



2-14. SERVO BOARD



SECTION 3
DIAGRAMS

3-1. IC PIN DESCRIPTIONS

• IC303 M30624MGP-124GP (SYSTEM CONTROL) (MAIN Board (3/4))

Pin No.	Pin Name	I/O	Pin Description
1	SIRCS	I	Remote control data input
2	FP_CTRL	—	Not used. (Open)
3	NC	O	Not used. (Open)
4	NC	I	Not used. (Open)
5	NC	O	Not used. (Open)
6	BYTE	I	L fixed terminal
7	CNVSS	I	Flash write-in signal input
8	XIN	I	Sub clock input (32kHz)
9	XOUT	O	Sub clock output (32kHz)
10	RESET	I	CPU reset signal input
11	OSCOUT	O	Main clock output (6MHz)
12	VSS	—	Ground
13	OSCIN	I	Main clock input (6MHz)
14	VCC1	—	Power supply pin (+5V)
15	NMI	I	Non maskable interrupt signal input
16	NC	O	Not used. (Open)
17	$\overline{\text{DAVN}}$	I	RDS data acquisition detect signal input
18	BU_IN	I	Back-up power detect signal input
19	NS_MASK	O	RDS NS MASK signal output
20	BEEP	O	Beep signal output
21	FLW_IN	I	OSC frequency shift signal for DC/DC conv.
22	FLW_OUT	O	OSC frequency shift signal for DC/DC conv.
23	SA_CLK	O	Spectrum analyzer clock signal output
24	TELATT	I	telephone mute detect signal input
25	ATT	O	Mute signal output
26	$\overline{\text{VOLATT}}$	O	Electronic volume mute signal output
27	I2C_CKO	O	Tuner/E-volume BUS clock output
28	I2C_SIO	O	Tuner/E-volume BUS data output
29	UNI_SO	O	BUS CONTROL data output
30	UNI_SI	I	BUS CONTROL data input
31	UNI_CKO	O	BUS CONTROL clock output
32	$\overline{\text{TUNERATT}}$	O	Tuner mute signal output
33	EESIO	I/O	EEPROM data input/output
34	EECKO	O	EEPROM clock output
35	NC	O	Not used. (Open)
36	NC	O	Not used. (Open)
37	NC	O	Not used. (Open)
38	NC	O	Not used. (Open)
39	HOLD	I	Flash write-in signal input
40	AMP_DIAG	I	Amplifier diagnosis signal input
41	AMP_STB	O	Amplifier strobe signal output
42	AMP_ON	O	Not used. (Open)
43	TUNER_ON	O	Not used. (Open)
44	WRI/WR	I	Connected to VCC (+5V)
45	NC	O	Not used. (Open)
46	NC	O	Not used. (Open)
47	NC	O	Not used. (Open)
48	NC	O	Not used. (Open)
49	NC	I	Not used. (Open)
50	DST_SEL1	I	Destination select signal input
51	DST_SEL2	I	Destination select signal input

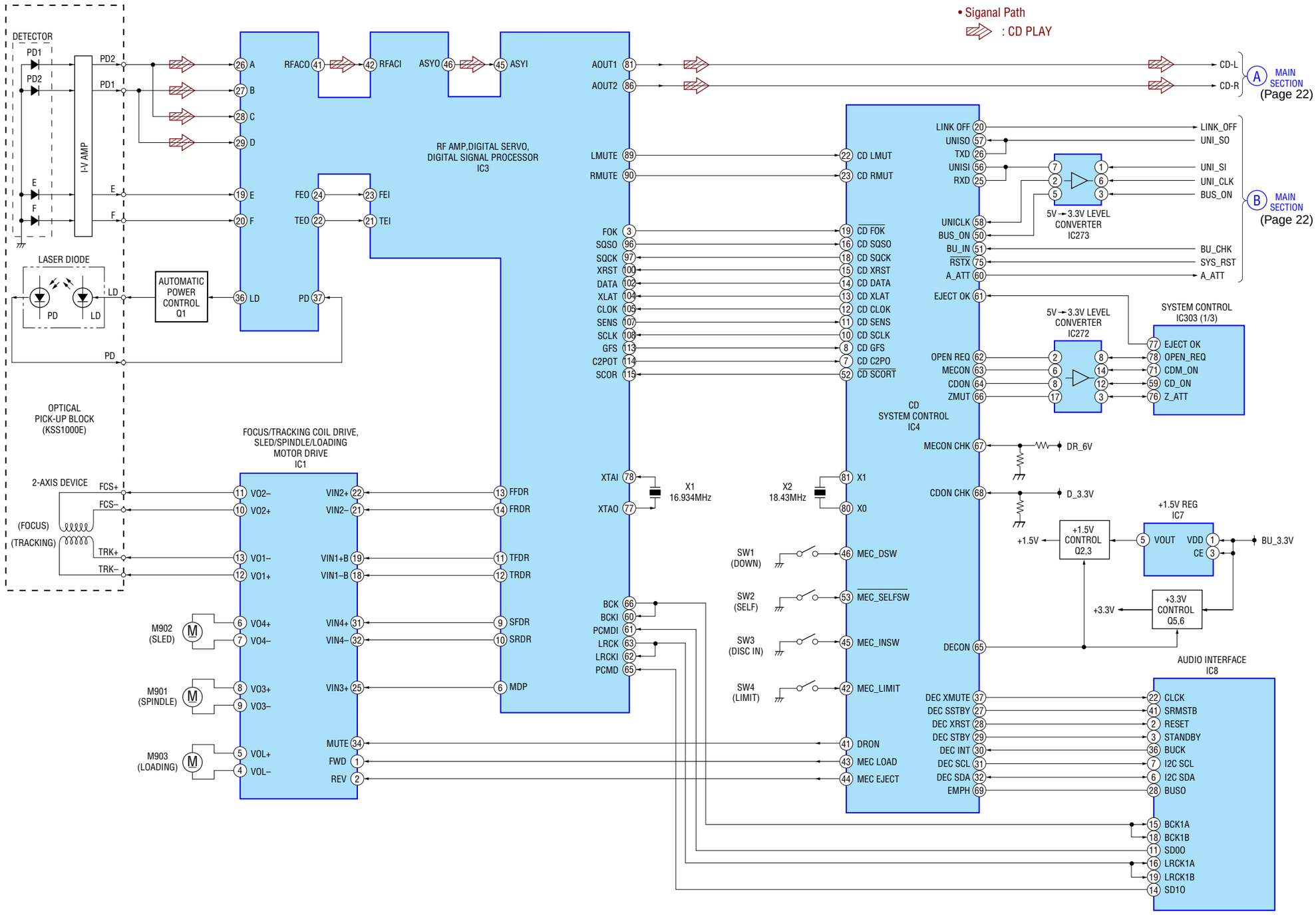
Pin No.	Pin Name	I/O	Pin Description
52	NC	O	Not used. (Open)
53	MOTOR ON	O	Front panel motor drive ON signal output
54	$\overline{\text{CLOSE-SW}}$	I	Front panel close switch signal input
55	$\overline{\text{OPEN-SW}}$	I	Front panel open switch signal input
56	I_DET	I	Motor current detect input
57	MOT–	O	Front panel open/close control signal output
58	MOT+	O	Front panel open/close control signal output
59	CD_ON	I	CD servo ON signal input
60	VCC2	—	Power supply pin (+5V)
61	$\overline{\text{RESET OUT}}$	O	Display CPU reset signal output
62	VSS	—	Ground
63	$\overline{\text{TEST IN}}$	I	Test mode setting detect signal input
64	$\overline{\text{BUS\_ON}}$	O	BUS ON control signal output
65	$\overline{\text{SYSRST}}$	O	System reset signal output
66	BUS/AUX	O	BUS/AUX select control signal output
67	NC	O	Not used. (Open)
68	$\overline{\text{ACC\_IN}}$	I	Accessory key ON detect signal input
69	$\overline{\text{ILL\_IN}}$	I	Illumination line detect signal input
70	RC_IN1	I	Rotary commander signal input 1
71	$\overline{\text{CDM\_ON}}$	I	CD drive power ON signal input
72	NC	O	Not used. (Open)
73	TU ATT-IN	I	Tuner mute condition signal input
74	NC	O	Not used. (Open)
75	NC	O	Not used. (Open)
76	Z_ATT	I	CD Z-MUTE signal input
77	EJECT-OK	O	CD EJECT-OK signal output
78	OPEN_REQ	I	CD OPEN REQ signal input
79	TEMP-TR	I	Temperature detect input
80	QUALITY	I	Tuner noise detect signal input
81	FP-I_DET	I	Front panel motor current detect signal input
82	VSM	I	S-meter signal input
83	SA_IN	I	Spectrum analyzer data input
84	KEYIN1	I	Key signal input 1
85	KEYIN0	I	Key signal input 0
86	RCIN0	I	Rotary commander signal input 0
87	KEY_ACK2	I	Key acknowledge detect signal input 2
88	KEY_ACK0	I	Key acknowledge detect signal input 0
89	KEY_ACK1	I	Key acknowledge detect signal input 1
90	OPEN_KEY	I	Open key detect signal input
91	RAM_BU	I	RAM back up signal input
92	FLD_ON	O	FL driver power supply ON/OFF signal output
93	FL_ON	O	FL power supply ON/OFF signal
94	AVSS	—	Ground
95	DISP_CE	O	Display CPU chip enable output
96	VREF	—	A/D converter reference voltage (+5V)
97	AVCC	—	Power supply pin (+5V)
98	DISP SI/RX	I	Display CPU BUS data input
99	DISP SO/TX	O	Display CPU BUS data output
100	DISP CKO	O	Display CPU BUS clock output

• IC2 M30823MH-081GP (DISPLAY SYSTEM CONTROL) (DISPLAY Board)

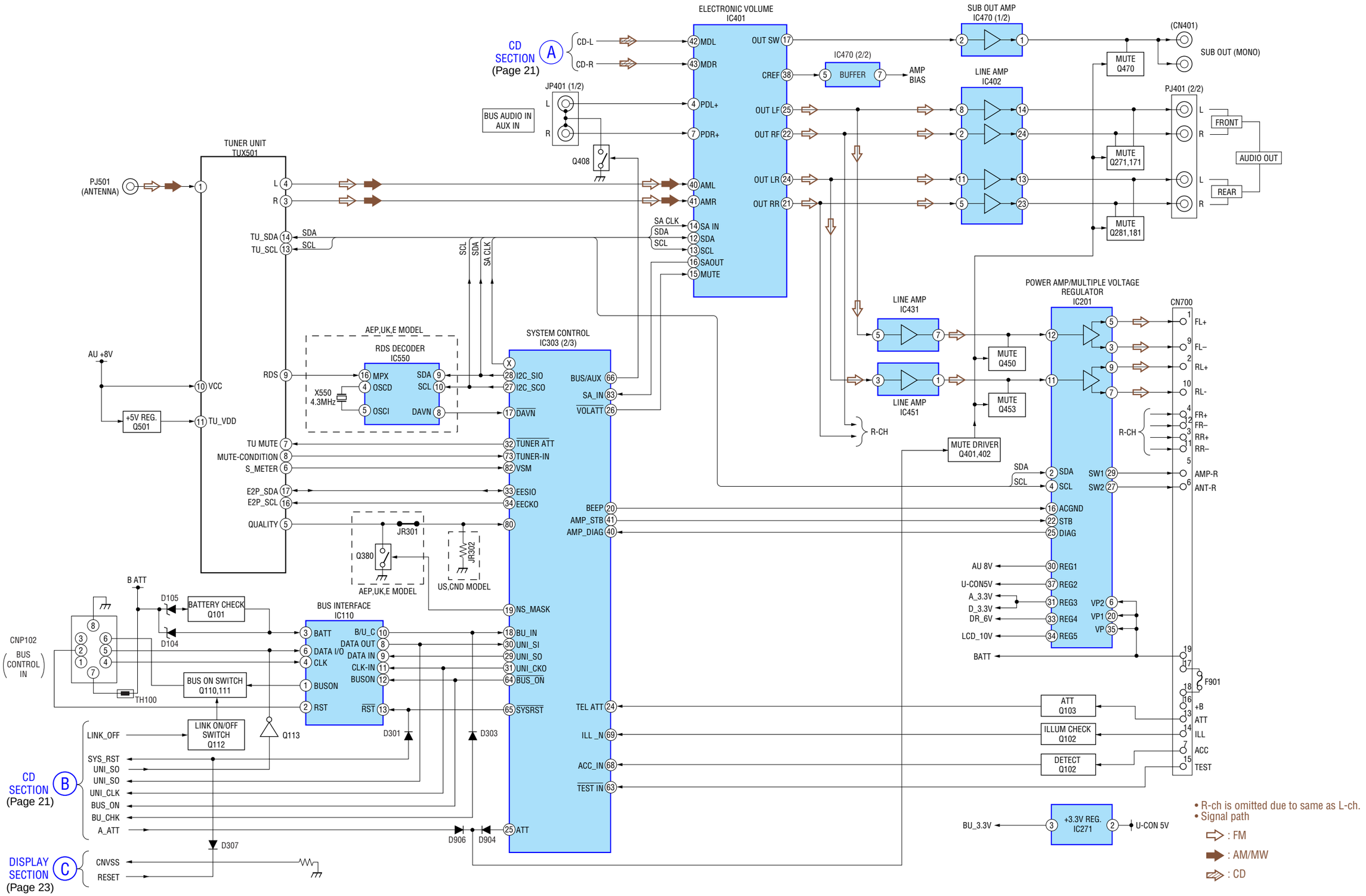
Pin No.	Pin Name	I/O	Pin Description
1	SYS_CE	I	Main chip enable signal input
2	NC	O	Not used. (Open)
3	FL_DAT3	O	FL serial data output
4	NC	O	Not used. (Open)
5	FL_CLK_IN	I	FL serial clock input
6	BYTE	I	L fixed terminal
7	CNVSS	I	Flash write signal input
8	PLL_LPF	O	Not used. (Open)
9	PLL_GND	I	Ground
10	RESET	I	CPU reset signal input
11	XOUT	O	Main clock output (8MHz)
12	VSS	—	Ground
13	XIN	I	Main clock input (8MHz)
14	VCC	—	Power supply pin (+5V)
15	NMI	I	Non maskable interrupt signal input
16	NC	O	Not used. (Open)
17	NC	I	GCP interrupt signal input (Connecting to pin 20)
18	NC	O	Not used. (Open)
19	NC	O	Not used. (Open)
20	NC	O	GCP interrupt signal output (Connecting to pin 17)
21	LAT	O	FL data latch signal output
22	BK	O	FL BK signal output
23	GCP2	O	FL GCP2 output
24	NC	O	Not used. (Open)
25	GCP1	O	FL GCP1 output
26	NC	O	Not used. (Open)
27	GCP4	O	FL GCP4 output
28	GCP3	O	FL GCP3 output
29	SYS_SO	O	System serial data output
30	SYS_SI	I	System serial data input
31	SYS_CLK	O	System serial clock input
32	NC	O	Not used. (Open)
33	FL_DAT1	O	FL serial data output
34	NC	O	Not used. (Open)
35	FL_CLK	O	FL serial clock output
36	LCD_CE	O	LCD driver chip enble signal output
37	LCD_INH	O	LCD driver inhibit signal output
38	NC	O	Not used. (Open)
39	HOLD	I	L fixed terminal
40 – 43	NC	O	Not used. (Open)
44	WRI/WR	I	H fixed terminal
45 – 59	NC	O	Not used. (Open)
60	VCC	—	Power supply pin (+5V)
61	NC	O	Not used. (Open)
62	VSS	—	Ground
63 – 67	NC	O	Not used. (Open)
68	LED_SW10	O	LED driver signal output
69	LED_SW9	O	LED driver signal output
70	LED_SW8	O	LED driver signal output
71	LED_SW7	O	LED driver signal output
72	LED_SW6	O	LED driver signal output
73	LED_SW5	O	LED driver signal output

Pin No.	Pin Name	I/O	Pin Description
74	LED_SW4	O	LED driver signal output
75	LED_SW3	O	LED driver signal output
76 – 93	NC	O	Not used. (Open)
94	AVSS	—	Ground
95	NC	O	Not used. (Open)
96	VREF	—	Power supply pin (+5V)
97	AVCC	—	Power supply pin (+5V)
98	RXD1	—	Not used. (Open)
99	FL_DATA2	O	FL serial data output
100	FL_CLK_IN	I	FL serial clock input

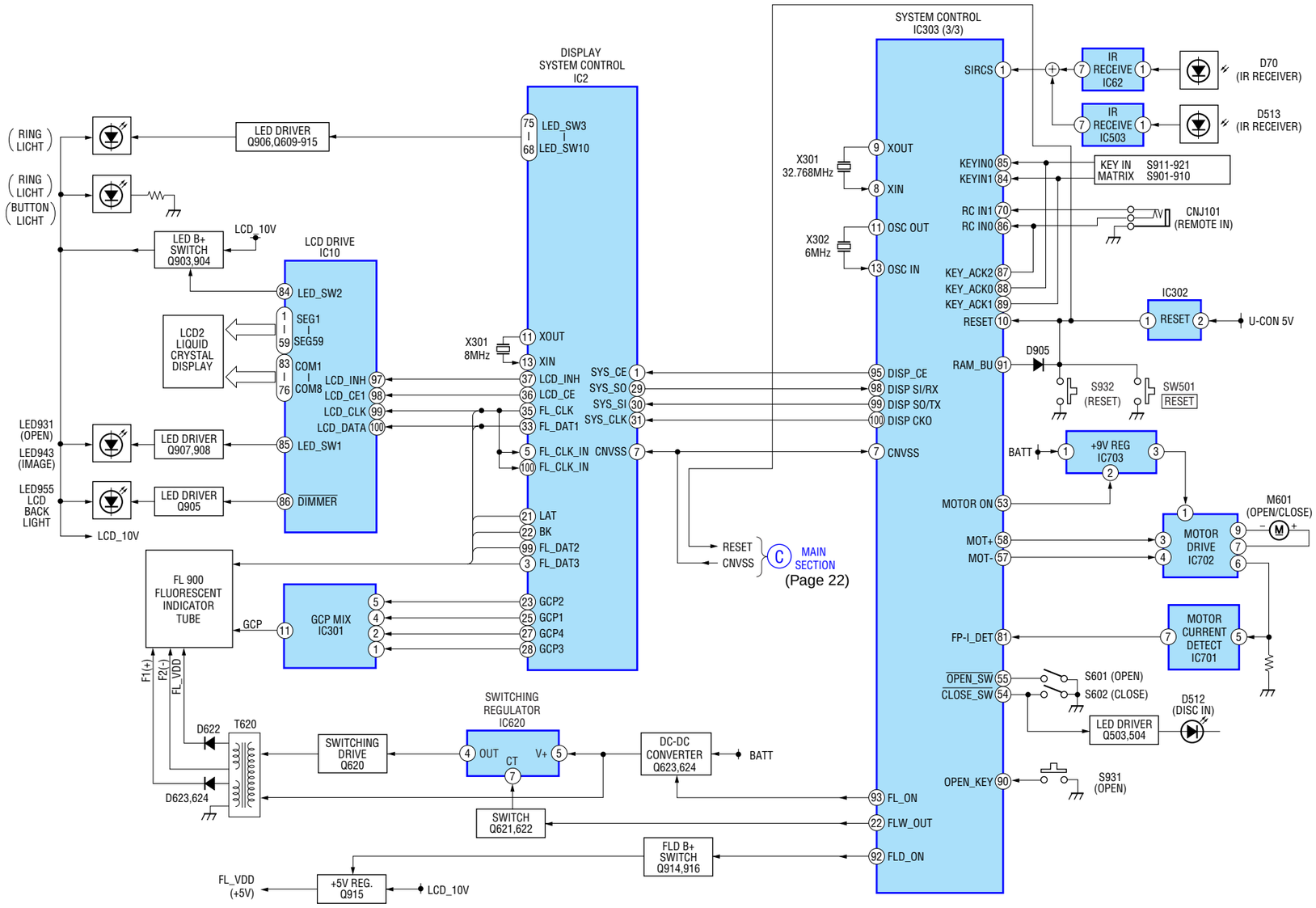
3-2. BLOCK DIAGRAM — CD SECTION —



3-3. BLOCK DIAGRAM — MAIN SECTION —



3-4. BLOCK DIAGRAM — DISPLAY SECTION —



3-5. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬ : B+ Line.
- ▬ ▬ : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- CD mechanism section
  no mark : CD PLAY
- Main (1/4), (2/4), (3/4), (4/4) and Key sections
  no mark : FM
  ( ) : AM/MW/LW
  < > : CD PLAY
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD PLAY
  ⇨ : FM
  ➡ : AM/MW/LW
- Abbreviation
  CND : Canadian model.

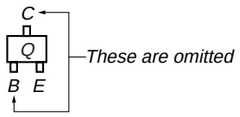
For printed wiring boards.

Note:

- o—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.



These are omitted

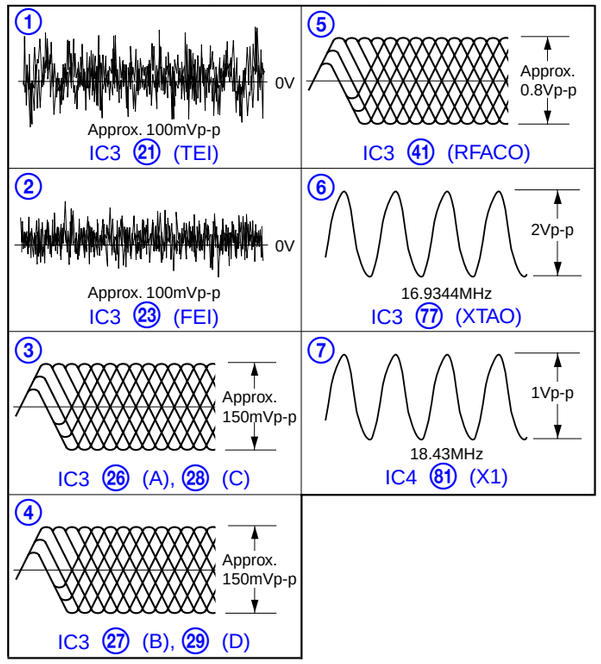
These are omitted

These are omitted

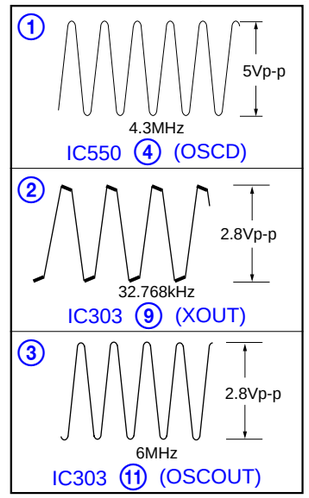
- Abbreviation
  CND : Canadian model.

3-6. WAVEFORMS

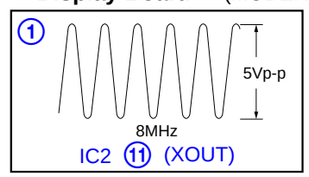
— Servo Board — (MODE: CD PLAY)



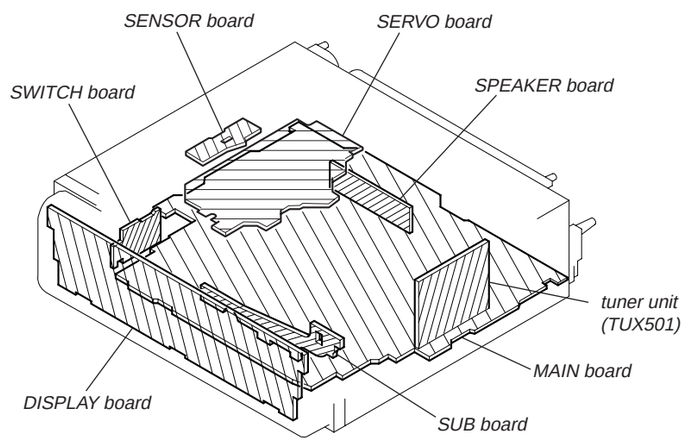
— Main Board — (MODE: FM)



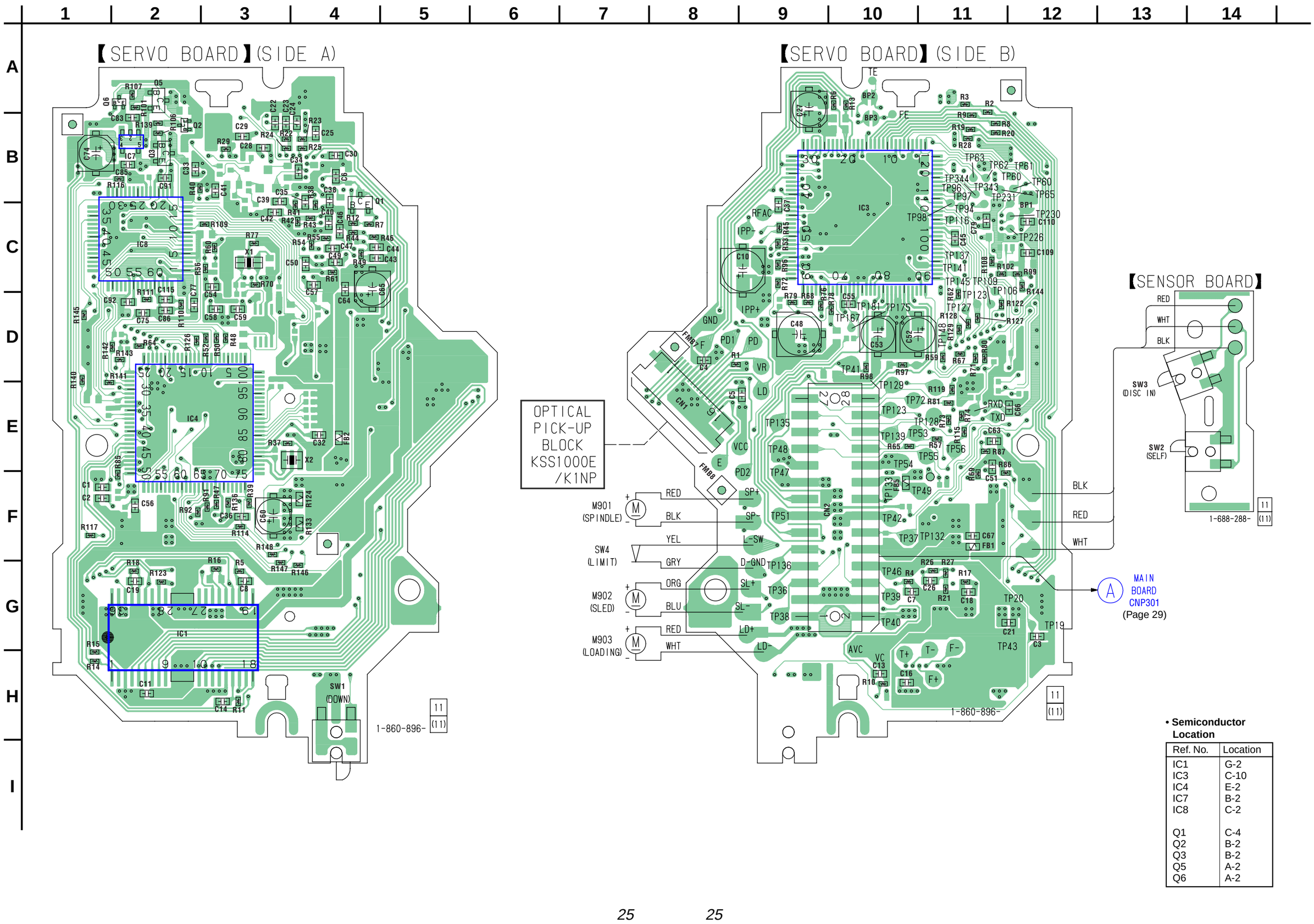
— Display Board — (MODE: FM)



3-7. CIRCUIT BOARDS LOCATION



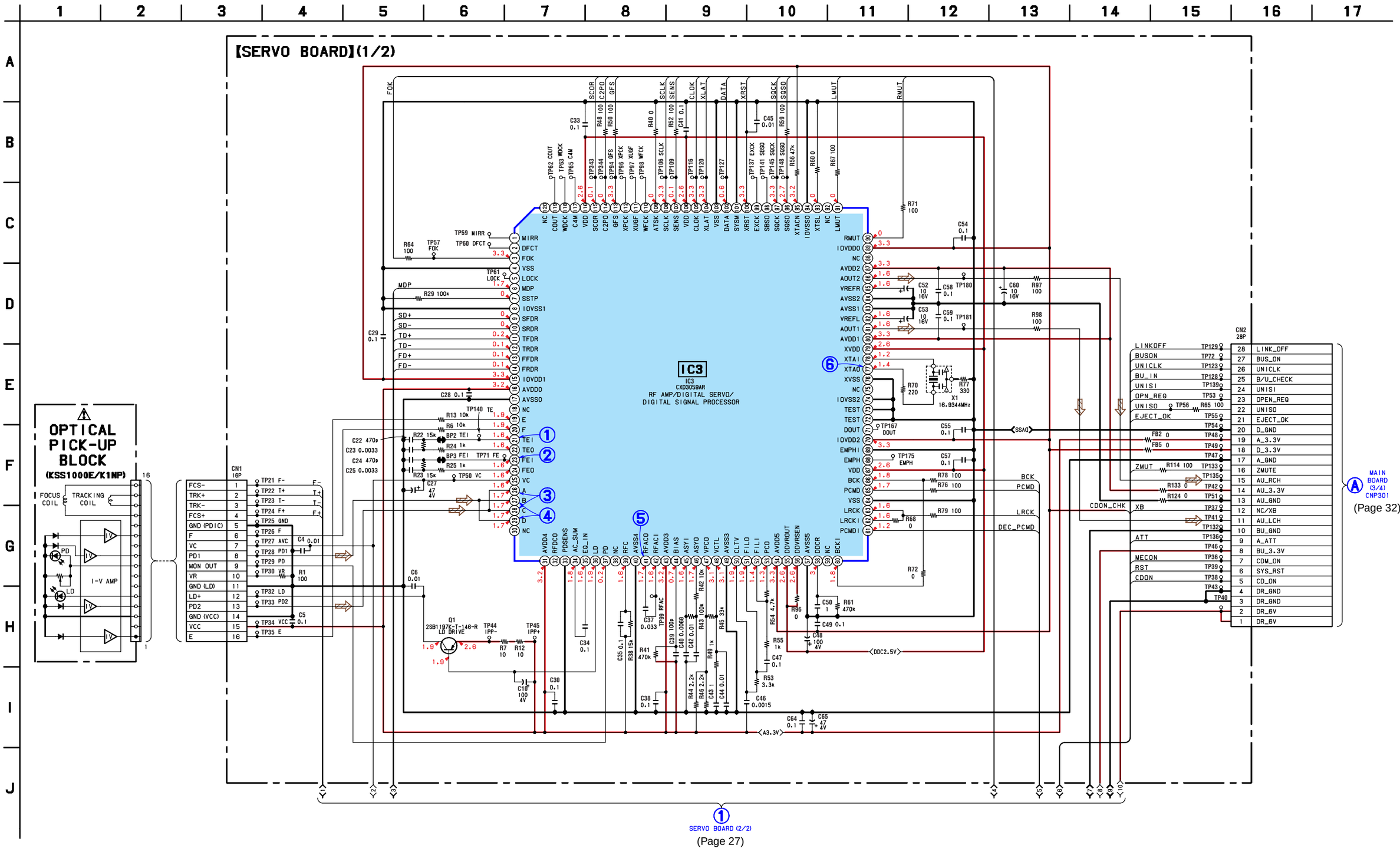
3-8. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 24 for Circuit Boards Location. : Uses unleaded solder.



• **Semiconductor Location**

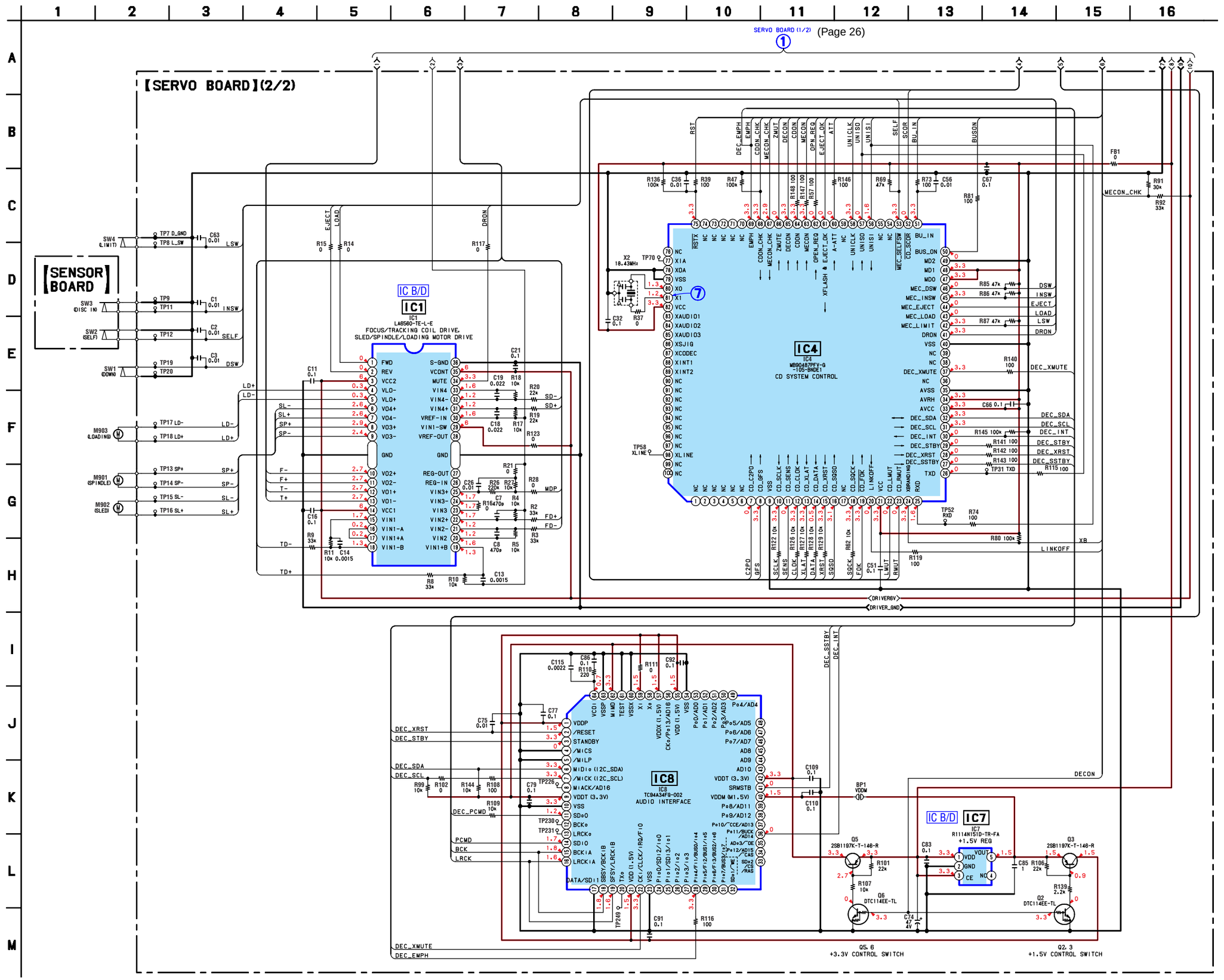
Ref. No.	Location
IC1	G-2
IC3	C-10
IC4	E-2
IC7	B-2
IC8	C-2
Q1	C-4
Q2	B-2
Q3	B-2
Q5	A-2
Q6	A-2

3-9. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) — • Refer to page 24 for Waveforms.



• Refer to page 24 for Waveforms.

3-10. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) — • Refer to page 38 for IC Block Diagrams.



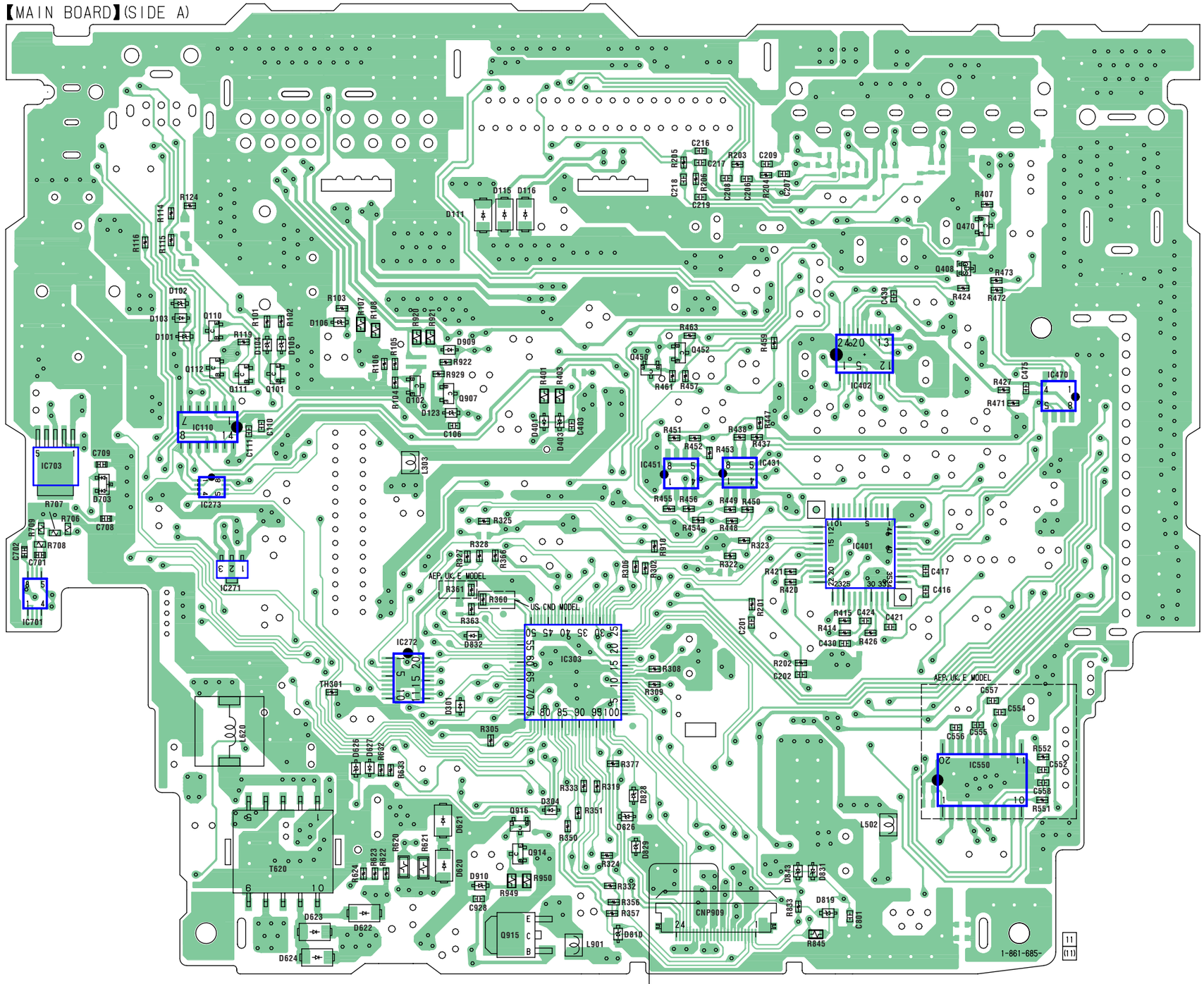
3-11. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 24 for Circuit Boards Location. : Uses unleaded solder.

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	D-10	(D907)	I-7
D102	D-10	D909	D-7
D103	D-10	D910	I-7
D104	D-9		
D105	D-9	IC110	E-9
D106	D-8	(IC201)	B-6
(D108)	E-8	IC271	F-9
(D109)	D-9	IC272	G-8
(D110)	B-8	IC273	F-9
D111	C-7	(IC302)	H-7
(D112)	B-8	IC303	G-6
(D113)	C-7	IC401	F-4
(D114)	C-6	IC402	E-4
D115	C-7	IC431	E-5
D116	C-7	IC451	E-5
(D117)	C-6	IC470	E-2
(D118)	C-8	IC550	H-3
(D119)	D-8	(IC620)	H-9
(D120)	C-5	IC701	G-11
(D121)	C-5	(IC702)	E-11
(D122)	C-3	IC703	E-11
D123	E-7		
D301	G-7	Q101	E-9
(D302)	H-8	Q102	E-8
(D303)	E-8	(Q103)	D-8
D304	H-6	Q110	D-9
(D305)	H-7	Q111	E-9
D401	E-7	Q112	E-9
D403	E-6	(Q113)	E-9
(D501)	G-2	(Q171)	C-4
D620	I-7	(Q181)	C-3
D621	H-7	(Q271)	C-4
D622	I-8	(Q281)	C-4
D623	I-9	(Q380)	F-7
D624	J-9	(Q401)	E-6
(D625)	H-9	(Q402)	E-6
D626	H-8	Q408	D-3
D627	H-8	Q450	D-6
D703	F-10	(Q451)	D-5
(D808)	I-6	Q452	D-5
D810	I-6	(Q453)	E-6
D819	I-4	Q470	C-3
(D822)	I-6	(Q501)	G-3
(D825)	I-6	(Q620)	I-9
D826	H-6	(Q621)	G-9
(D827)	I-5	(Q622)	G-9
D828	H-6	(Q623)	G-9
D829	I-6	(Q624)	G-10
D831	I-4	Q907	E-7
D832	G-7	Q914	I-7
D843	I-4	Q915	I-7
(D904)	F-7	Q916	H-7
(D906)	F-7		

( ): SIDE B

【MAIN BOARD】(SIDE A)



(Page 36)

【MAIN BOARD】(SIDE B)

(Page 34) SPEAKER BOARD D

(Page 34) SPEAKER BOARD E

PJ401

PJ501 (ANTENNA)

SUB OUT (MONO)

BUS AUDIO IN AUX IN

AUDIO OUT REAR FRONT

CNJ101 (REMOTE IN)

CNP102 (SUB CONTROL IN)

CNP101

IC201

F901

TH100

L101

TUX501

CN401

CN506

CNP301

IC702

IC703

IC620

IC302

CN902

W601 (OPEN/CLOSE)

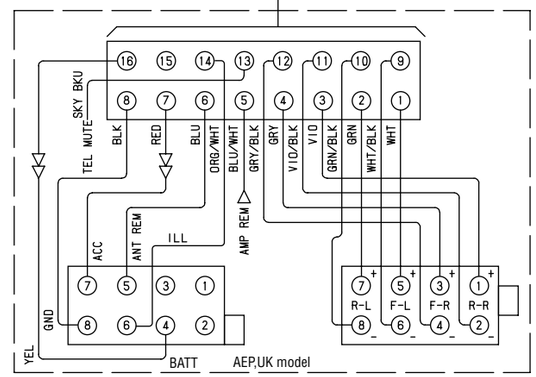
【SWITCH BOARD】

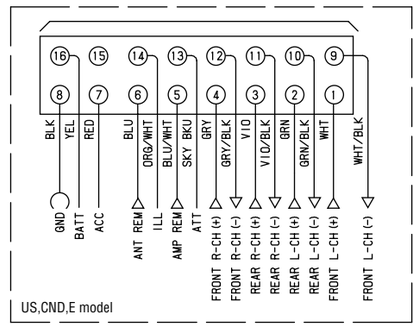
US, CND MODEL

AEP, UK, E MODEL

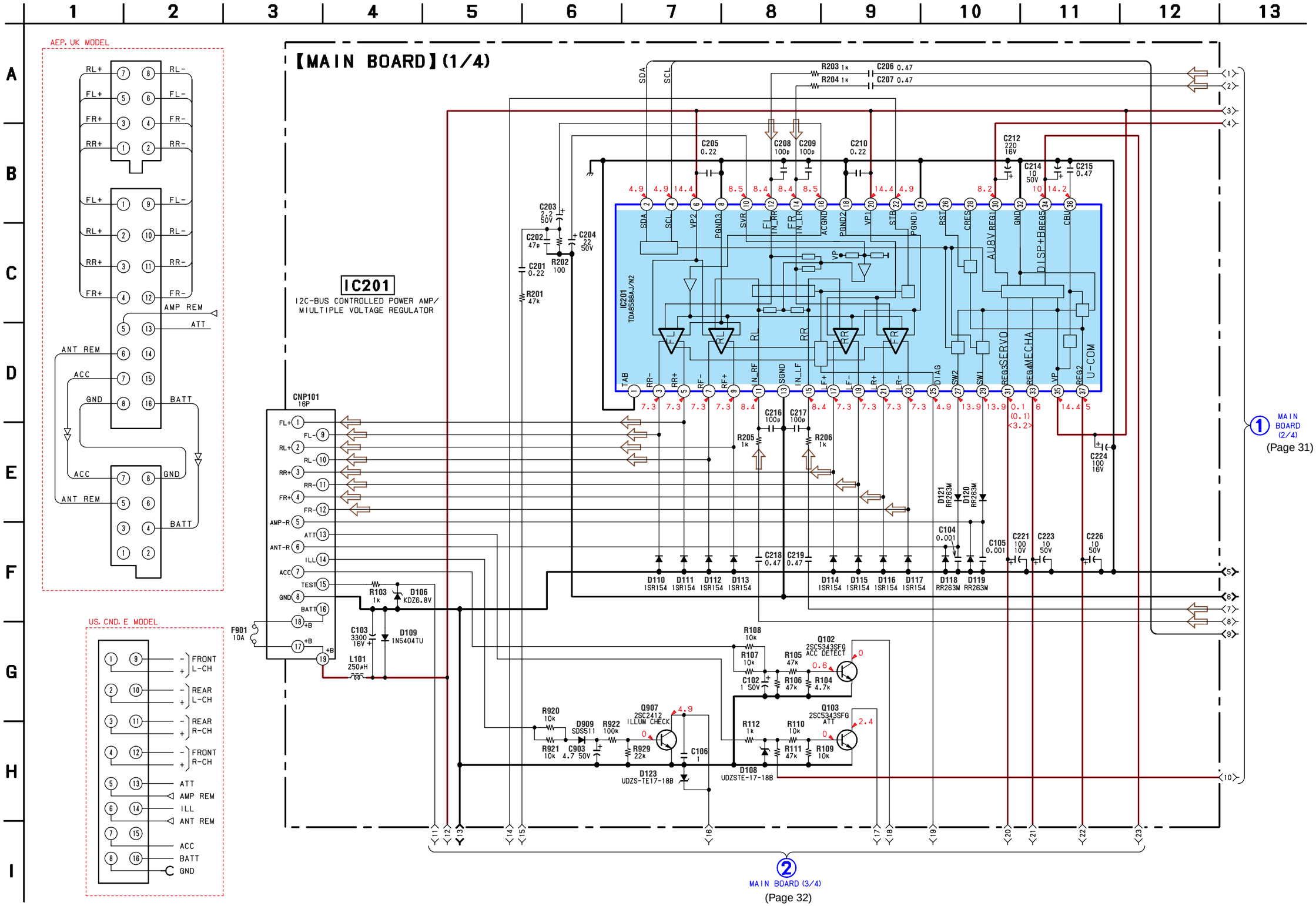
A SERVO BOARD CN2 (Page 25)

B SUB BOARD (Page 34)





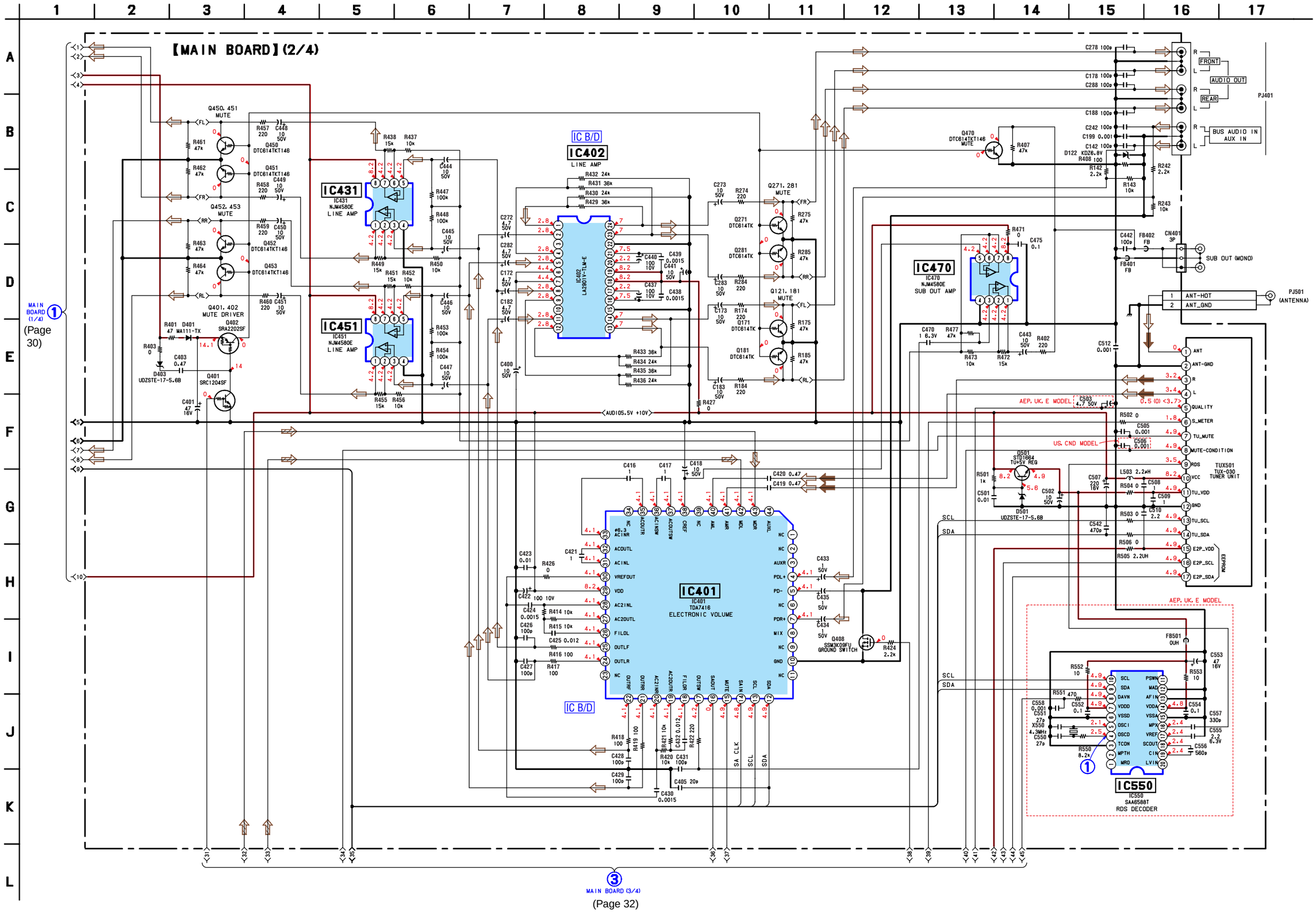
3-12. SCHEMATIC DIAGRAM — MAIN SECTION (1/4) —



• Refer to page 24 for Waveform.

3-13. SCHEMATIC DIAGRAM — MAIN SECTION (2/4) —

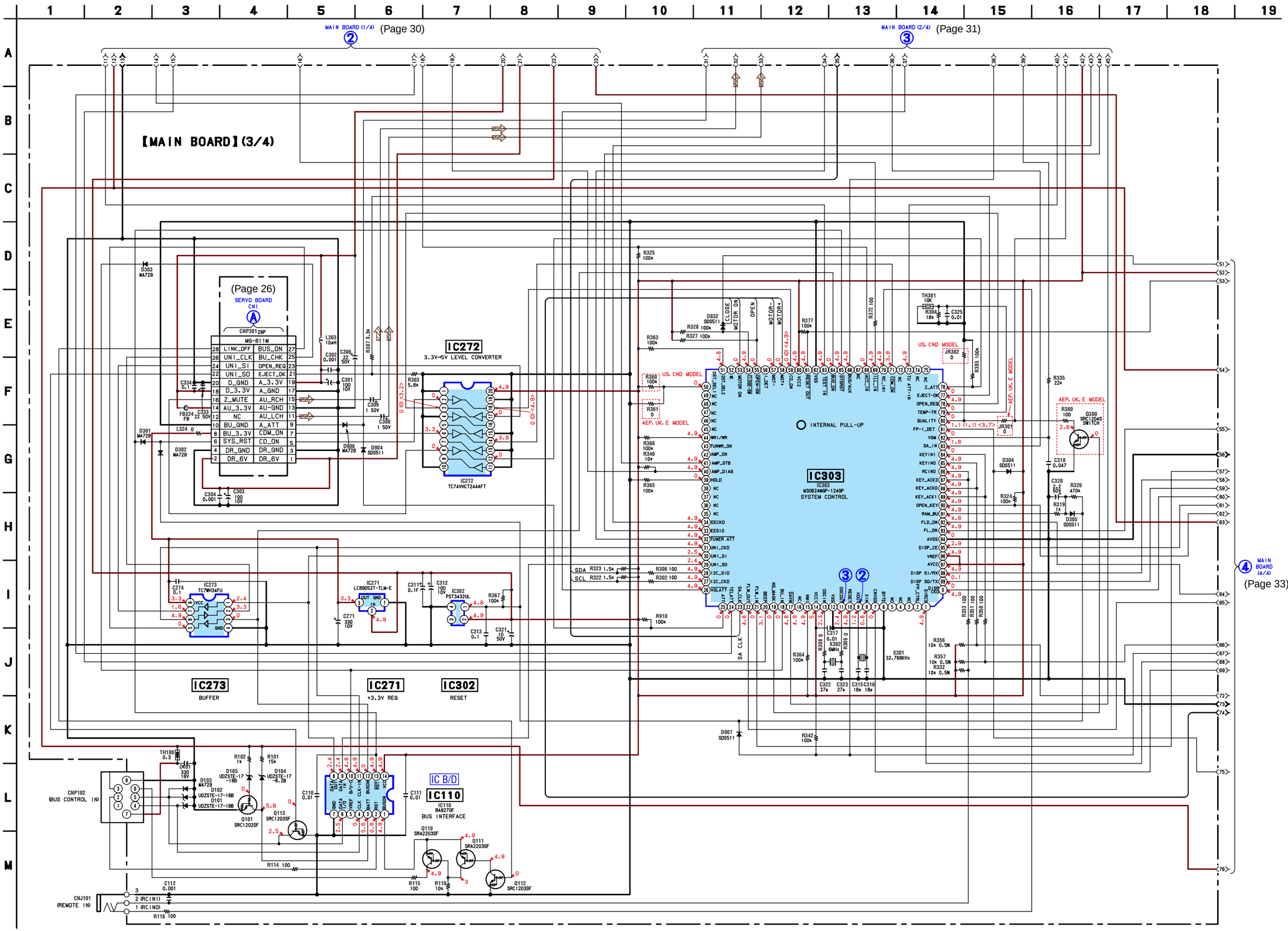
• Refer to page 38 for IC Block Diagrams.



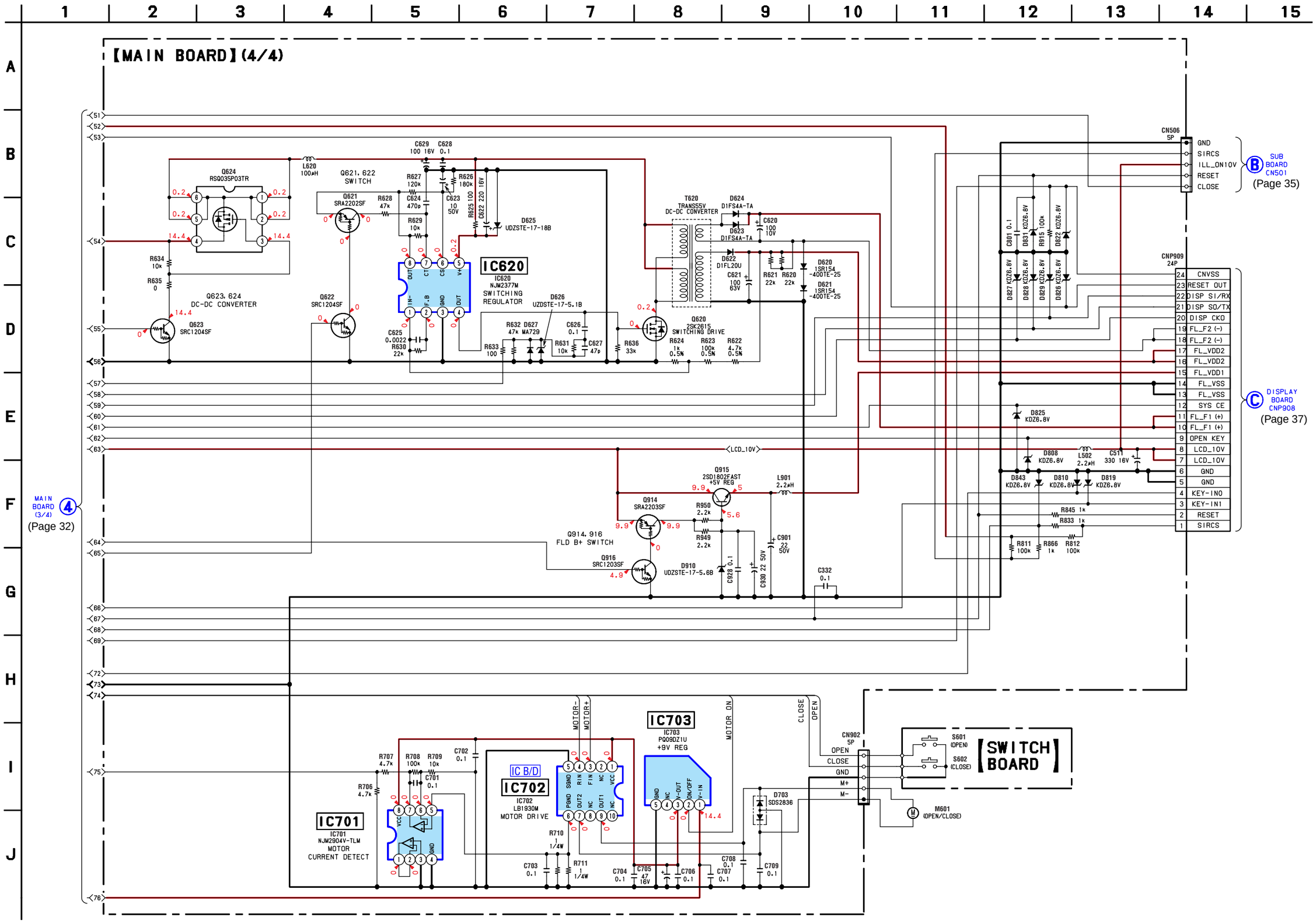
• Refer to page 24 for Waveform.

3-14. SCHEMATIC DIAGRAM — MAIN SECTION (3/4) —

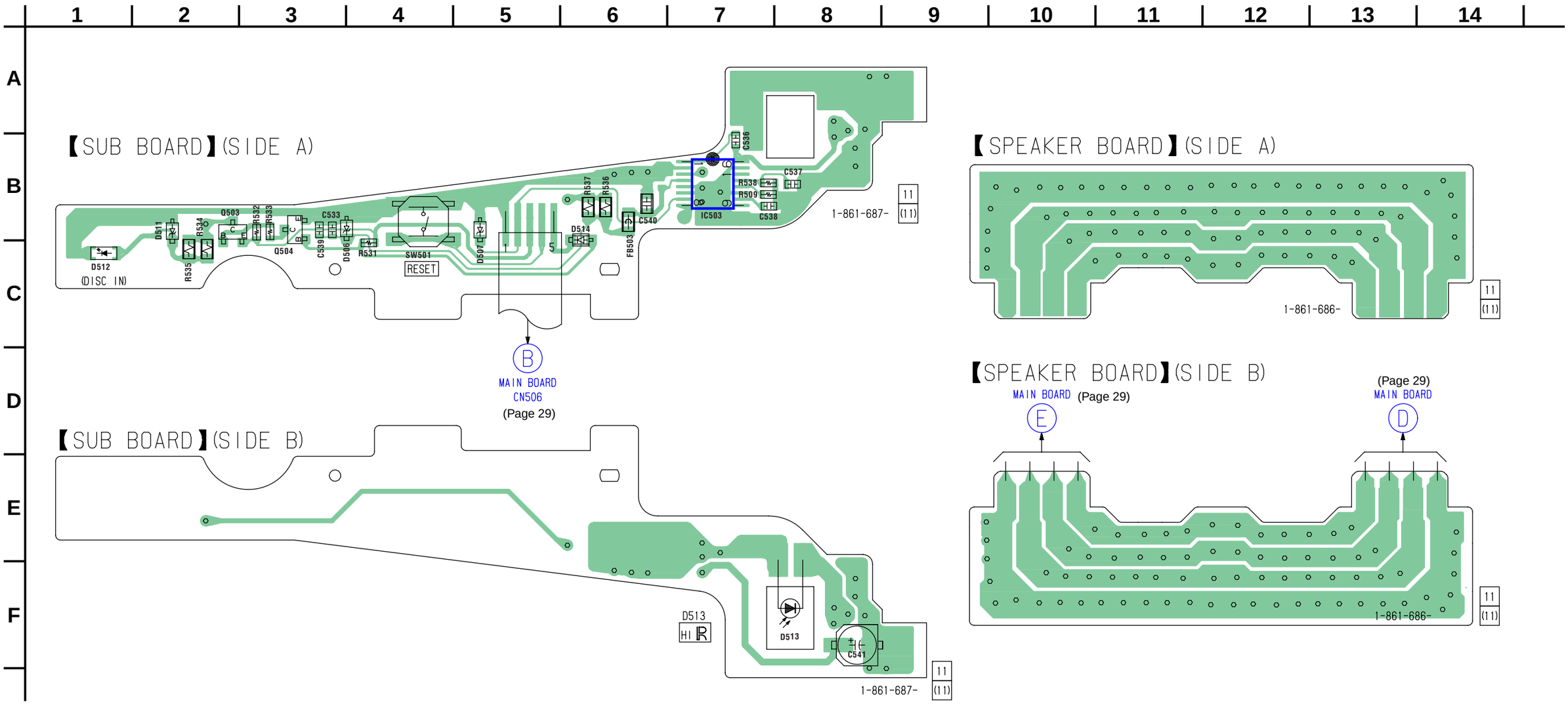
• Refer to page 39 for IC Block Diagram.



3-15. SCHEMATIC DIAGRAM — MAIN SECTION (4/4) — • Refer to page 39 for IC Block Diagram.



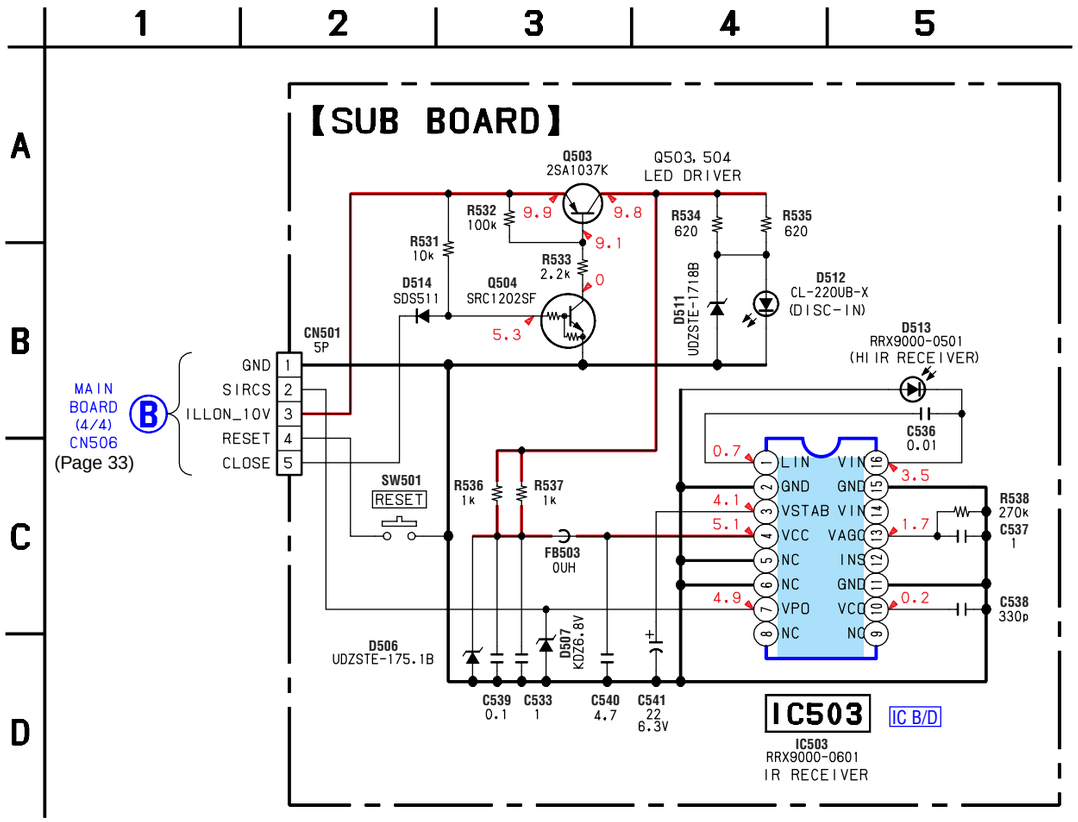
3-16. PRINTED WIRING BOARD — SUB SECTION — • Refer to page 24 for Circuit Boards Location. : Uses unleaded solder.



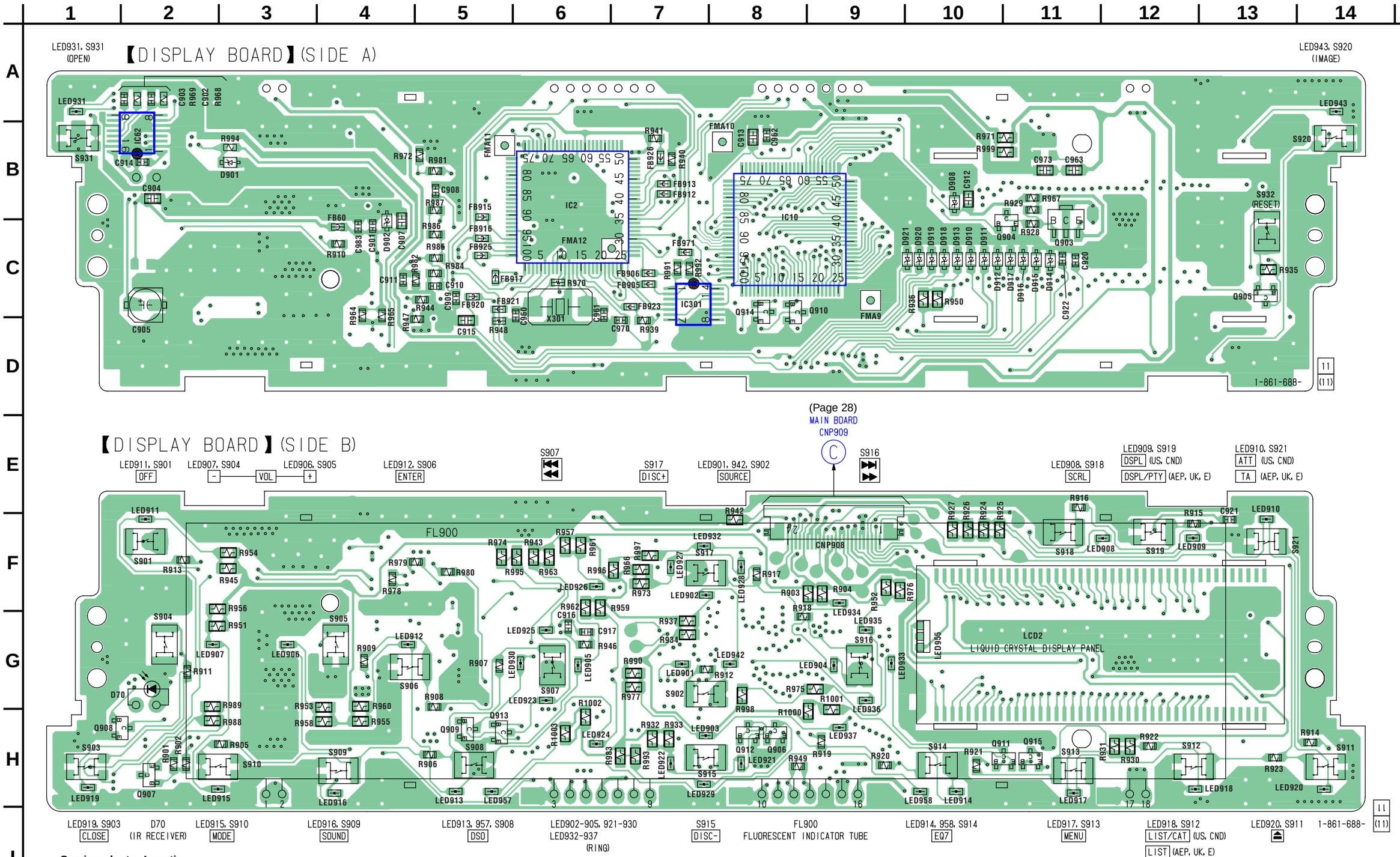
• **Semiconductor Location**

Ref. No.	Location
D506	C-3
D507	B-5
D511	B-2
D512	C-1
D513	F-8
D514	B-6
IC503	B-7
Q503	B-2
Q504	B-3

3-17. SCHEMATIC DIAGRAM — SUB SECTION — • Refer to page 40 for IC Block Diagram.



3-18. PRINTED WIRING BOARD — DISPLAY SECTION — • Refer to page 24 for Circuit Boards Location. : Uses unleaded solder.

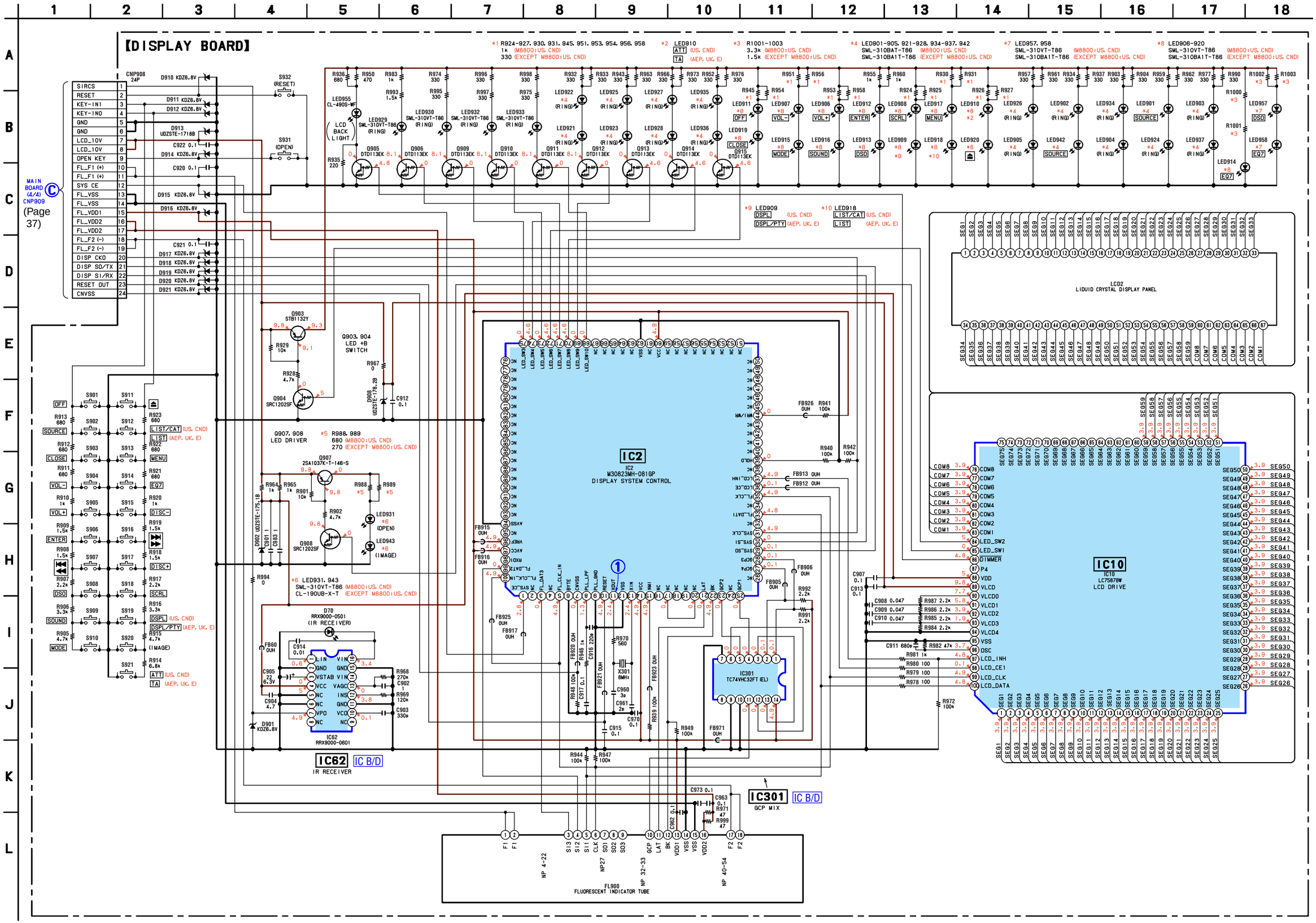


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D70	H-1	D916	C-11	IC301	D-7	LED909	F-12	LED919	F-2	LED929	I-7	LED943	A-14	Q908	H-1
D901	B-3	D917	C-11			LED910	F-13	LED920	I-14	LED930	G-5	LED955	G-10	Q909	H-5
D902	C-4	D918	C-10	LED901	G-7	LED911	F-2	LED921	H-8	LED931	A-1	LED957	I-5	Q910	C-9
D908	B-10	D919	C-10	LED902	G-7	LED912	G-4	LED922	H-7	LED932	F-7	LED958	I-10	Q911	H-10
D910	C-10	D920	C-10	LED903	H-7	LED913	I-5	LED923	H-6	LED933	G-9			Q912	H-8
D911	C-10	D921	C-10	LED904	G-9	LED914	I-10	LED924	H-6	LED934	G-9	Q903	C-11	Q913	H-5
D912	C-10			LED905	G-6	LED915	I-2	LED925	G-6	LED935	G-9	Q904	C-10	Q914	C-8
D913	C-10	IC2	B-6	LED906	G-3	LED916	I-4	LED926	G-6	LED936	H-9	Q905	C-13	Q915	H-11
D914	C-11	IC10	B-8	LED907	G-2	LED917	I-11	LED927	F-7	LED937	H-9	Q906	H-8		
D915	C-11	IC62	B-2	LED908	F-12	LED918	I-13	LED928	G-8	LED942	G-8	Q907	I-2		

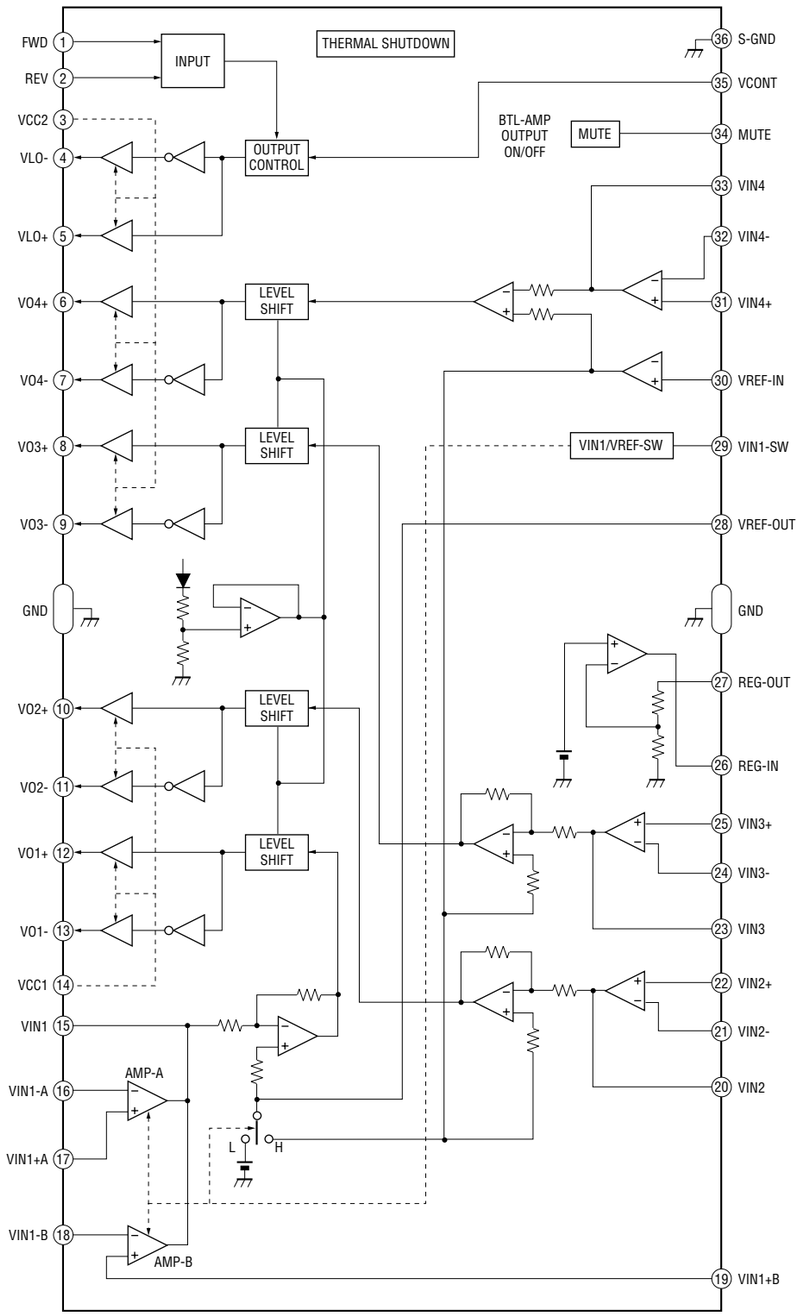
• Refer to page 24 for Waveform.
• Refer to page 40 for IC Block Diagrams.

3-19. SCHEMATIC DIAGRAM — DISPLAY SECTION —

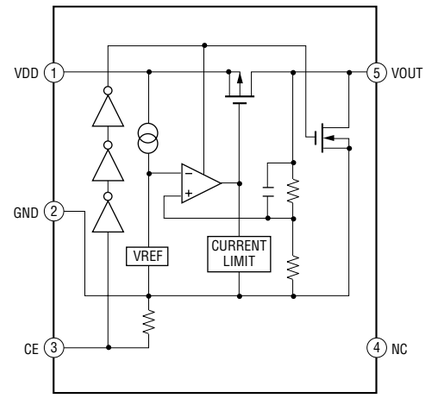


3-20. IC BLOCK DIAGRAMS

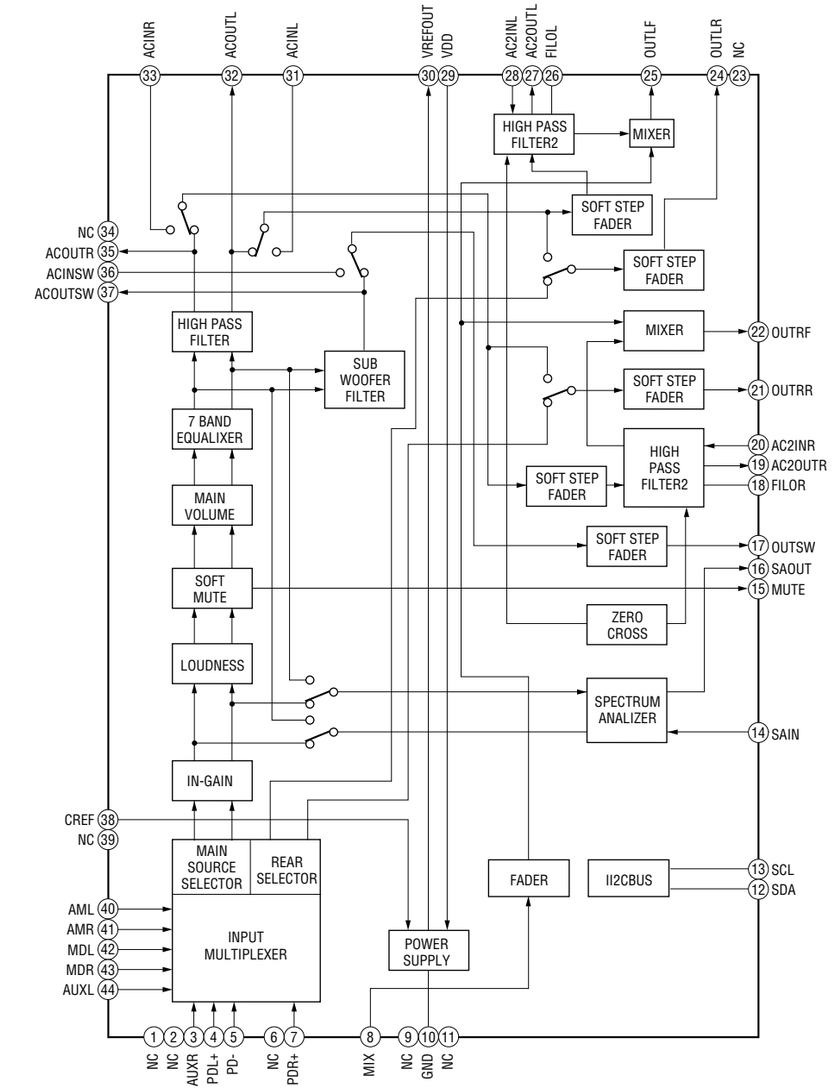
IC1 LA6560-TE-L-E (SERVO Board (2/2))



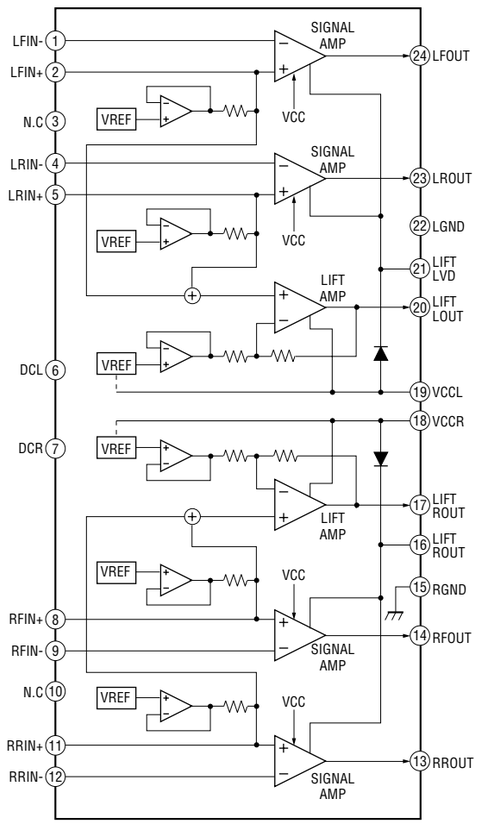
IC7 R1114N151D-TR-FA (SERVO Board (2/2))



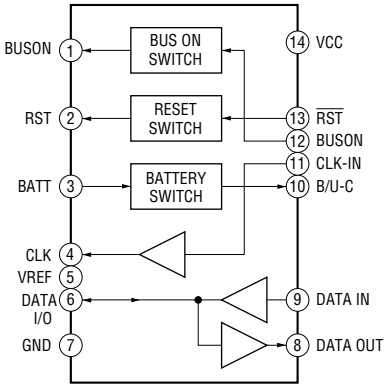
IC401 TDA7416 (MAIN Board (2/4))



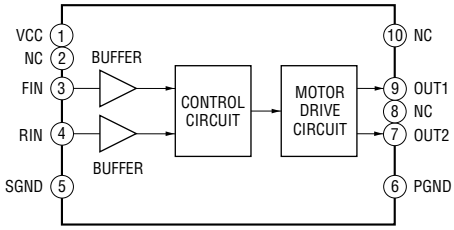
IC402 LA2901V-TLM (MAIN Board (2/4))



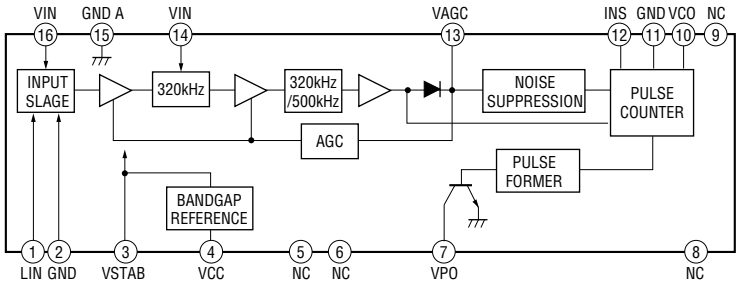
IC110 BA8270F (MAIN Board (3/4))



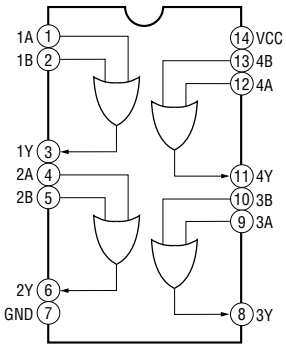
IC702 LB1930M (MAIN Board (4/4))



IC503 RRX9000-0601 (SUB Board)
IC62 RRX9000-0601 (DISPLAY Board)



IC301 TC74VHC32FT(EL) (DISPLAY Board)



SECTION 4
EXPLODED VIEWS

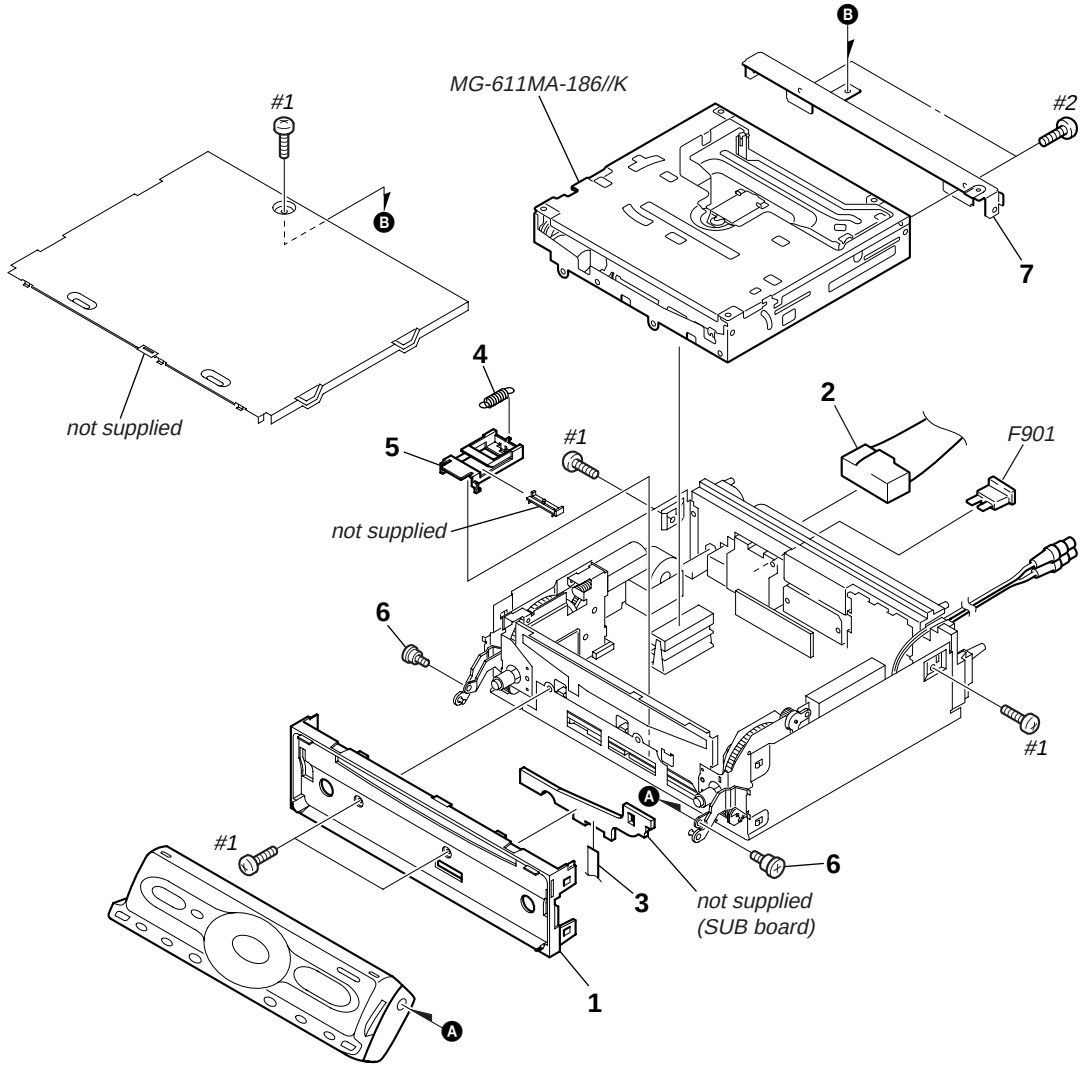
NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of this parts list.
- Abbreviation
  CND: Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

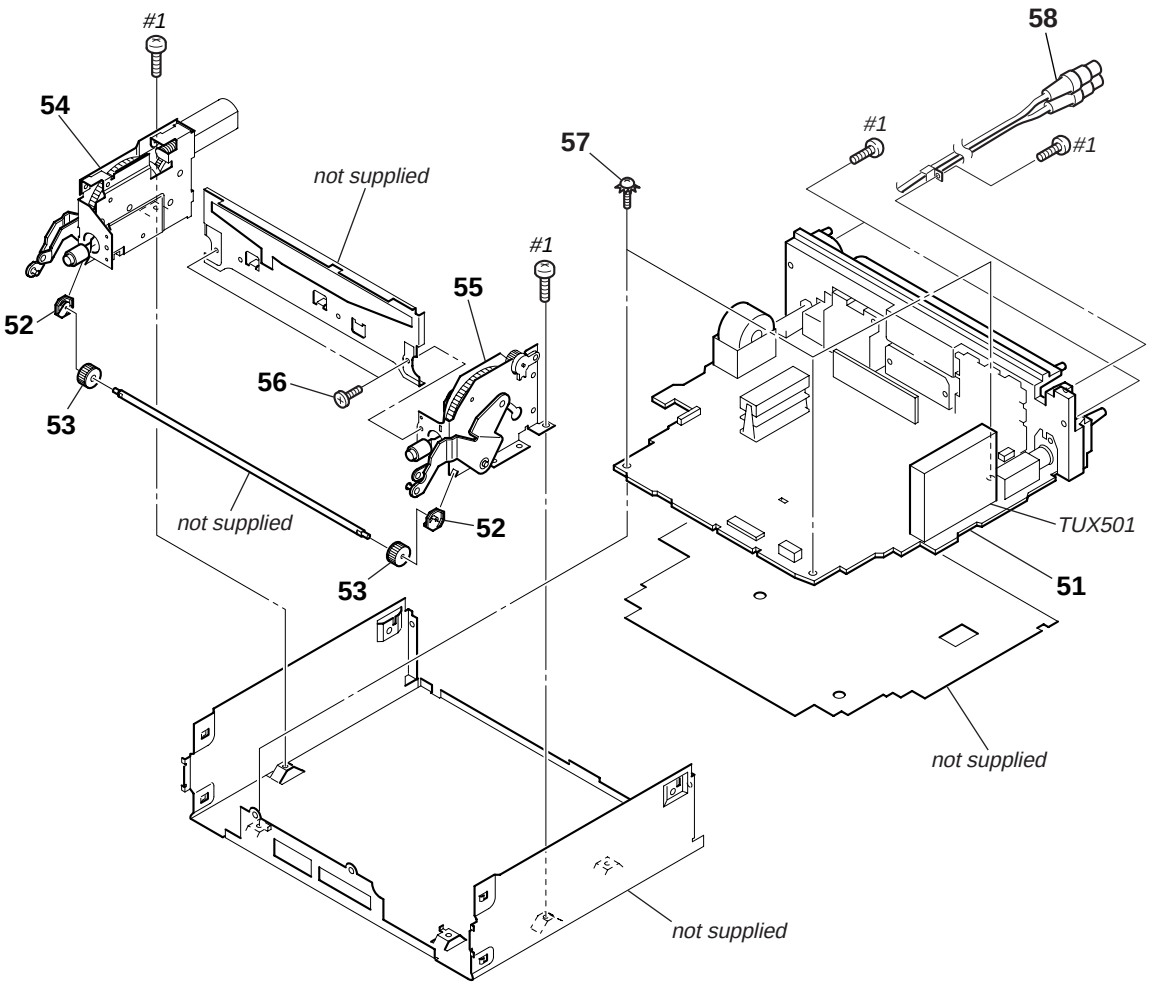
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

4-1. CHASSIS SECTION



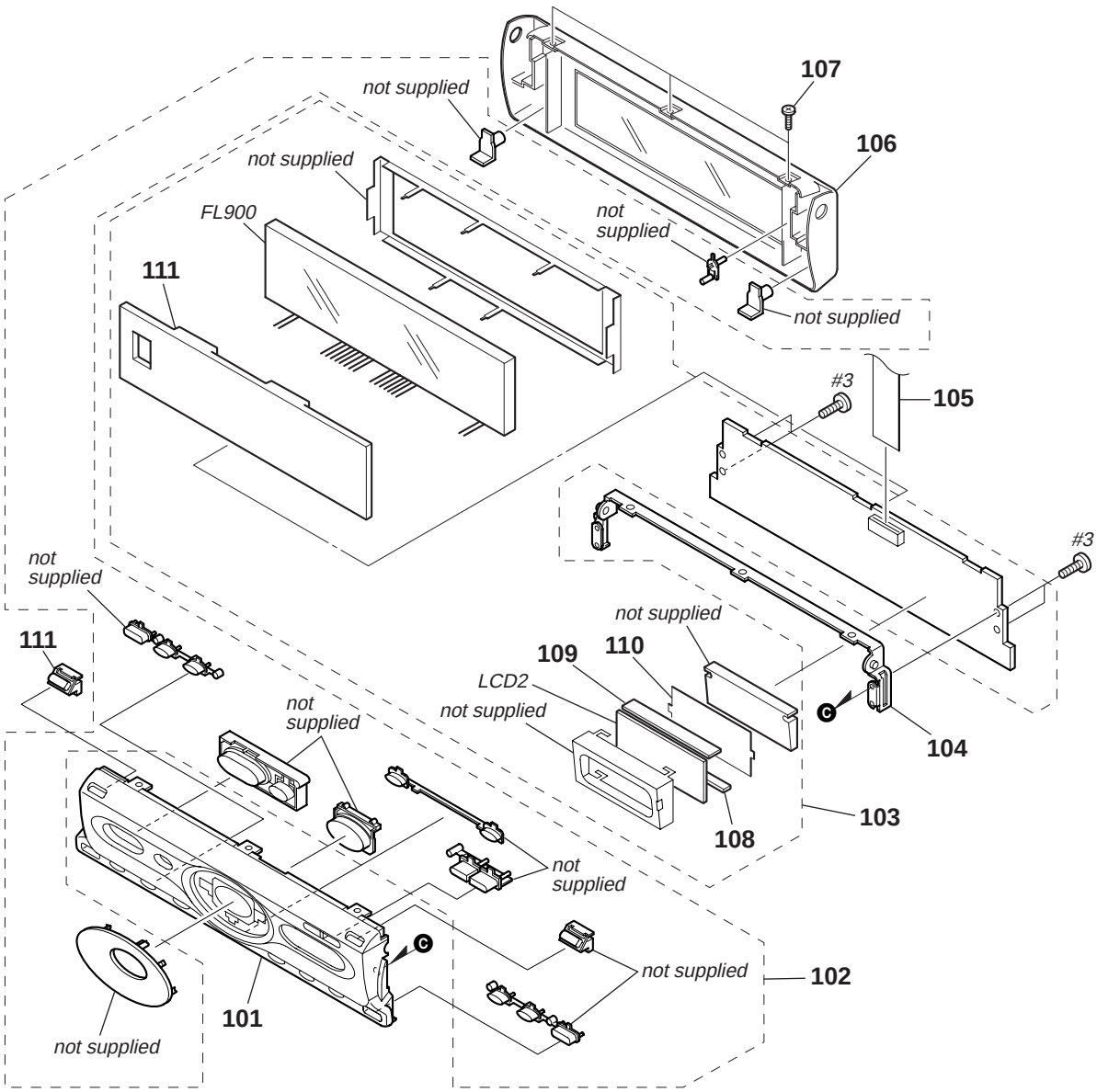
Ref. No.	Part No.	Description	Remark
1	X-3384-498-1	PANEL (CD) ASSY, SUB (M8800:US,CND)	
1	X-3384-499-1	PANEL (CD) ASSY, SUB (AEP,UK,E)	
1	X-3384-786-1	PANEL (CD) ASSY, SUB (M8805X)	
2	1-776-207-72	CORD (WITH CONNECTOR) (POWER)	(US,CND,E)
2	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK)
3	1-829-084-11	CABLE, FLAT (FFC) 5P	
4	3-264-985-01	SPRING (FPC), TENSION	
5	3-264-984-01	COVER (FPC)	
6	3-045-756-02	SCREW (PANEL)	
7	3-248-858-01	BRACKET (CD) (AEP,UK,E)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-09	SCREW +PTT 2.6X4 (S)	

4-2. MAIN BOARD SECTION



Ref. No.	Part No.	Description	Remark
51	A-3283-596-A	MAIN BOARD, COMPLETE (US,CND)	
51	A-3283-622-A	MAIN BOARD, COMPLETE (AEP,UK,E)	
52	3-262-629-01	GUIDE (DRIVE SHAFT)	
53	3-262-621-01	GEAR (DRIVE SHAFT)	
54	X-3384-804-1	SERVICE ASSY, DRIVING (A)	
55	X-3384-805-1	SERVICE ASSY, FOLLOW MOVE (A)	
56	2-641-447-11	SCREW (2.6X6), +STP	
57	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
58	1-790-375-22	CORD (WITH CONNECTOR) (SUB OUT (MONO))	
TUX501	A-3220-959-A	TUNER UNIT (TUX-032)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	

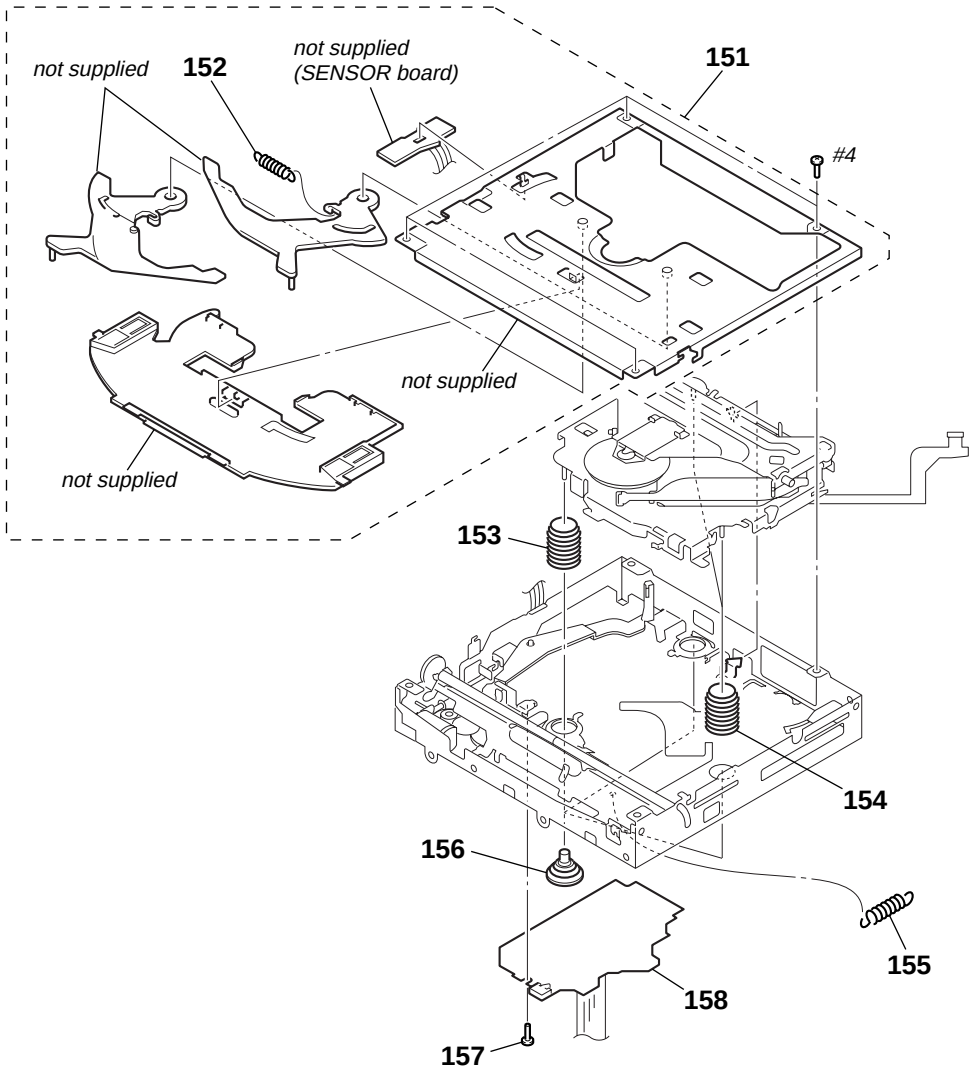
4-3. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	X-3384-477-1	PANEL (KEY) ASSY, FRONT (US,CND)	
101	X-3384-480-1	PANEL (KEY) ASSY, FRONT (AEP,UK,E)	
102	X-3384-912-1	BUTTON ASSY (S)	
103	A-3283-600-A	DISPLAY BOARD, COMPLETE (M8800:US,CND)	
103	A-3283-619-A	DISPLAY BOARD, COMPLETE (EXCEPT M8800:US,CND)	
104	X-3384-478-1	PANEL ASSY, BRACKET	
105	1-861-811-11	FLEXIBLE BOARD	
106	X-3384-911-1	DSPL ASSY, PANEL FRONT (S)	
107	2-626-869-01	SCREW (M2X3), SERRATION	

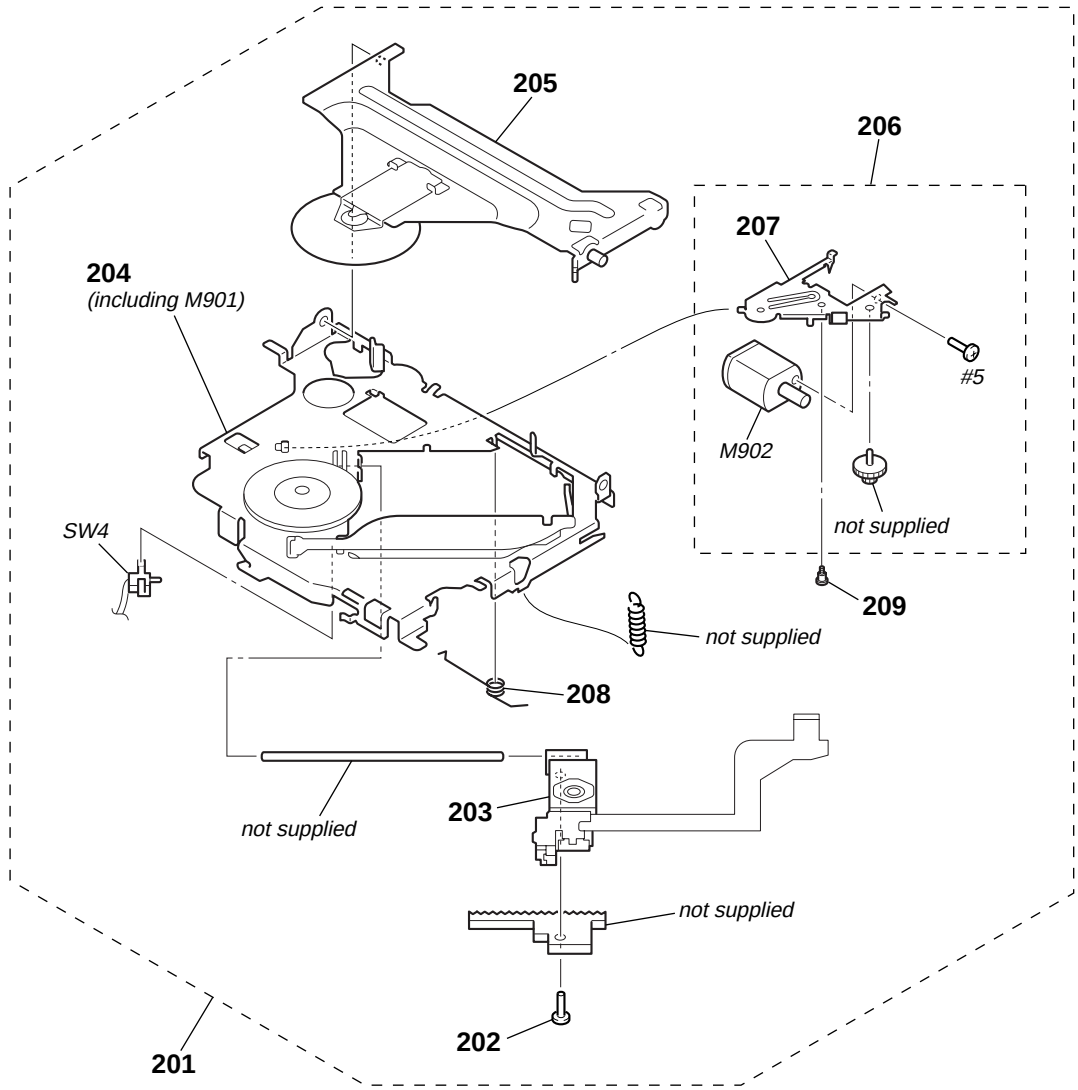
Ref. No.	Part No.	Description	Remark
108	1-780-137-11	CONDUCTIVE BOARD, CONNECTION	
109	1-780-138-11	CONDUCTIVE BOARD, CONNECTION	
110	3-260-053-01	SHEET (LCD KEY), DIFFUSION	
111	3-260-040-11	BUTTON (OFF) (US,CND)	
111	3-260-040-21	BUTTON (OFF) (AEP,UK,E)	
112	3-260-035-01	PANEL (FL), GUIDE	
FL900	1-518-954-11	INDICATOR TUBE, FLUORESCENT	
LCD2	1-805-459-11	DISPLAY PANEL, LIQUID CRYSTAL	
#3	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	

4-4. CD MECHANISM SECTION (1)
(MG-611MA-186//K)



Ref. No.	Part No.	Description	Remark
151	A-3372-455-A	CHASSIS (T) SUB ASSY	
152	3-253-729-01	SPRING (LTR), TENSION COIL	
153	3-253-746-13	SPRING (DAMPER), COMPRESSION	
154	3-253-746-03	SPRING (DAMPER), COMPRESSION	
155	3-253-695-01	SPRING (KF), TENSION COIL	
156	3-253-748-01	DAMPER (S)	
157	3-352-758-31	SCREW (M1.7), TOOTHED LOCK	
158	A-3283-359-A	SERVO BOARD, COMPLETE	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-5. CD MECHANISM SECTION (2)
(MG-611MA-186//K)

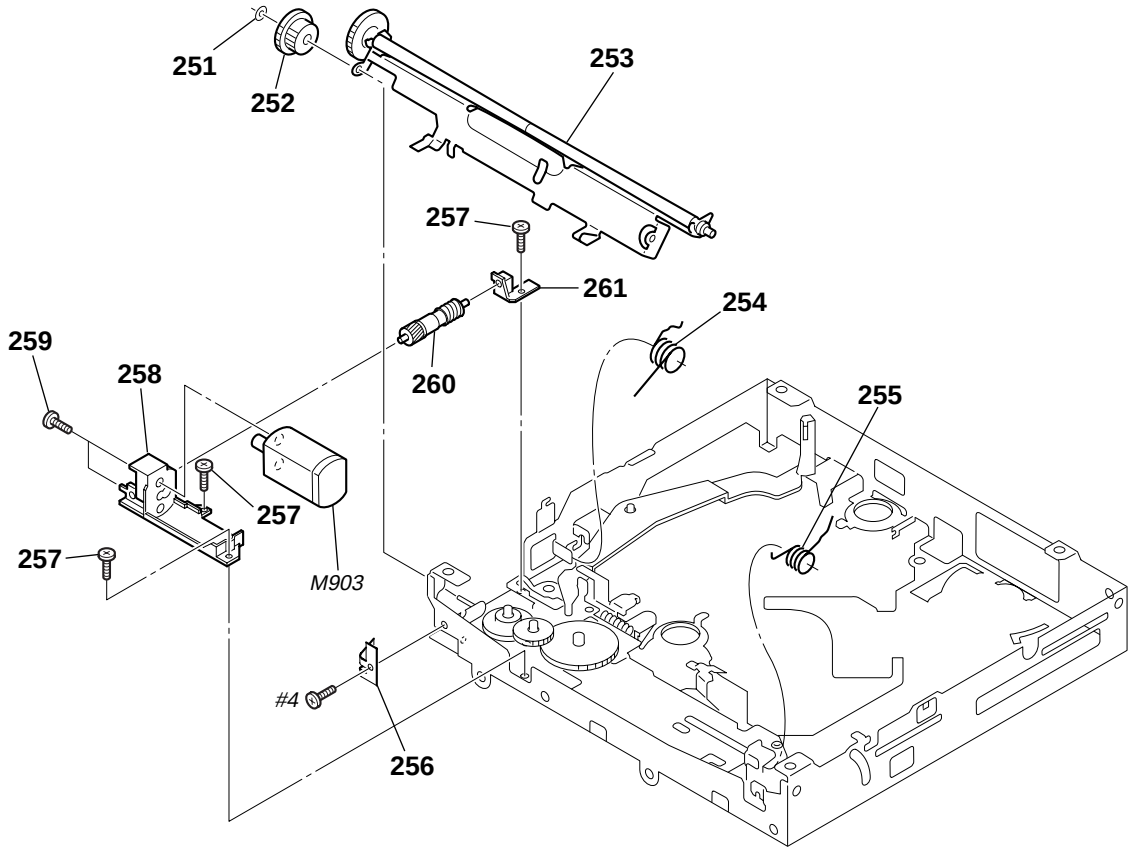


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
201	A-3337-637-A	CHASSIS (OP) COMPLETE ASSY	
202	3-316-938-91	SCREW (B1.4X5), TAPPING	
⚠203	8-820-207-02	OPTICAL PICK-UP (KSS1000E/K1RP)	
204	A-3337-640-A	CHASSIS (OP) SUB ASSY (including M901)	
205	A-3337-641-A	ARM SUB ASSY, CHUCKING	
206	A-3337-639-A	LEVER (SL) SUB ASSY	

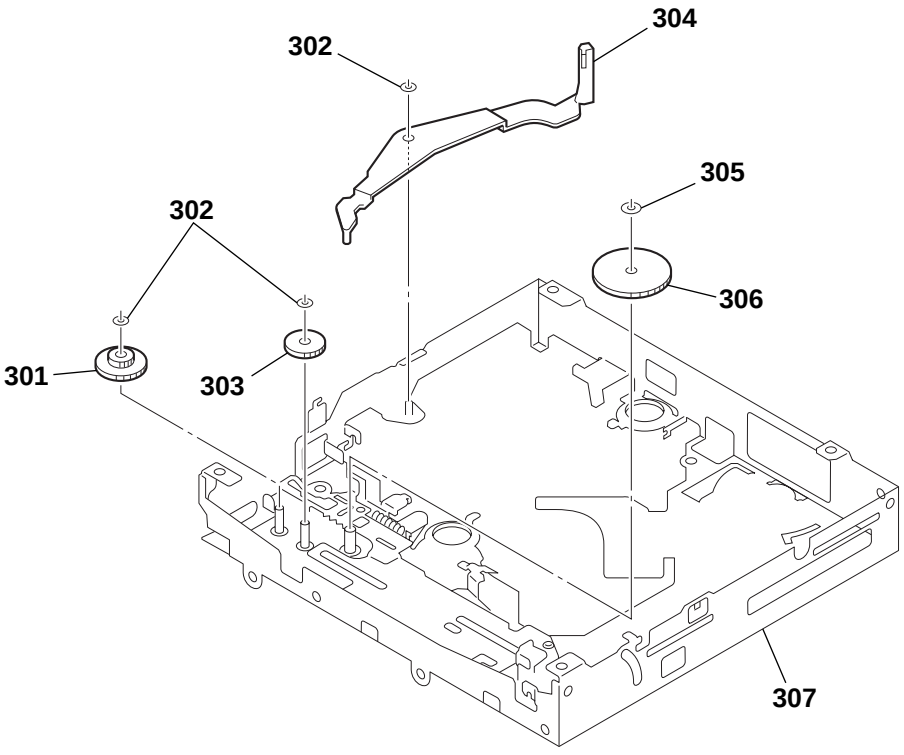
Ref. No.	Part No.	Description	Remark
207	X-3383-454-3	LEVER (SL) ASSY	
208	3-261-959-02	SPRING (SL), TORSION	
209	3-264-165-02	SCREW	
M902	A-3337-638-A	MOTOR ASSY, SL (SLED)	
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)	
#5	7-627-850-77	SCREW, PRECISION +P 1.4X1.8	

4-6. CD MECHANISM SECTION (3)
(MG-611MA-186//K)



Ref. No.	Part No.	Description	Remark
251	3-262-755-01	WASHER (1.1-2.5)	
252	3-259-024-01	WHEEL (RA), WORM	
253	A-3337-633-A	ARM ASSY, ROLLER	
254	3-259-455-02	SPRING (RAL)	
255	3-253-713-01	SPRING (RAR)	
256	3-259-469-01	SPRING (LE), LEAF	
257	2-134-636-31	SCREW (M1.7X2.5)	
258	3-259-467-01	BRACKET (LEM)	
259	3-345-648-91	SCREW (M1.4), TOOTHED LOCK	
260	A-3372-456-A	WORM (LEB) ASSY	
261	3-259-468-01	BEARING (LEB)	
M903	A-3372-454-A	MOTOR ASSY, LE (LOADING)	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-7. CD MECHANISM SECTION (4)
(MG-611MA-186//K)



Ref. No.	Part No.	Description	Remark
301	3-259-429-01	WHEEL (LE), WORM	
302	3-344-223-01	WASHER	
303	3-259-470-01	GEAR (LE1)	
304	3-253-755-01	LEVER (D)	
305	3-899-829-01	WASHER (SLIT)	
306	3-259-032-01	GEAR (LE2)	
307	A-3372-453-A	CHASSIS (M) BLOCK ASSY	

DISPLAY

SECTION 5
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Abbreviation
  CND: Canadian model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-3283-600-A	DISPLAY BOARD, COMPLETE (M8800:US,CND)			
	A-3283-619-A	DISPLAY BOARD, COMPLETE (EXCEPT M8800:US,CND)			
		**********			
	1-780-137-11	CONDUCTIVE BOARD, CONNECTION			
	1-780-138-11	CONDUCTIVE BOARD, CONNECTION			
	3-260-035-01	PANEL (FL), GUIDE			
	3-260-053-01	SHEET (LCD KEY), DIFFUSION			
		< CAPACITOR >			
C901	1-125-837-11	CERAMIC CHIP	1uF	10% 6.3V	
C902	1-125-837-11	CERAMIC CHIP	1uF	10% 6.3V	
C903	1-162-959-11	CERAMIC CHIP	330PF	5% 50V	
C904	1-127-760-11	CERAMIC CHIP	4.7uF	10% 6.3V	
C905	1-124-778-00	ELECT CHIP	22uF	20% 6.3V	
C907	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C908	1-165-176-11	CERAMIC CHIP	0.047uF	10% 16V	
C909	1-165-176-11	CERAMIC CHIP	0.047uF	10% 16V	
C910	1-165-176-11	CERAMIC CHIP	0.047uF	10% 16V	
C911	1-115-412-11	CERAMIC CHIP	680PF	5% 25V	
C912	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C913	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C914	1-162-970-11	CERAMIC CHIP	0.01uF	10% 25V	
C915	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C916	1-164-230-11	CERAMIC CHIP	220PF	5% 50V	
C917	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C920	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C921	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C922	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C960	1-162-908-11	CERAMIC CHIP	3PF	0.25PF 50V	
C961	1-162-907-11	CERAMIC CHIP	2PF	0.25PF 50V	
C962	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C963	1-165-319-11	CERAMIC CHIP	0.1uF	50V	
C970	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C973	1-165-319-11	CERAMIC CHIP	0.1uF	50V	
C983	1-125-837-11	CERAMIC CHIP	1uF	10% 6.3V	
		< CONNECTOR >			
CNP908	1-774-678-21	CONNECTOR, FPC (ZIF) 24P			
		< DIODE >			
D70	8-719-083-14	DIODE RRX9000-0501			
D901	8-719-977-12	DIODE DTZ6.8B			
D902	8-719-069-54	DIODE UDZS-TE17-5.1B			
D908	8-719-056-85	DIODE UDZ-TE-17-8.2B			
D910	8-719-977-12	DIODE DTZ6.8B			
D911	8-719-977-12	DIODE DTZ6.8B			
D912	8-719-977-12	DIODE DTZ6.8B			
D913	8-719-083-66	DIODE UDZS-TE17-18B			
D914	8-719-977-12	DIODE DTZ6.8B			
D915	8-719-977-12	DIODE DTZ6.8B			
D916	8-719-977-12	DIODE DTZ6.8B			
D917	8-719-977-12	DIODE DTZ6.8B			
D918	8-719-977-12	DIODE DTZ6.8B			
D919	8-719-977-12	DIODE DTZ6.8B			
D920	8-719-977-12	DIODE DTZ6.8B			
D921	8-719-977-12	DIODE DTZ6.8B			
		< FERRITE BEAD >			
FB60	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB905	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB906	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB912	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB913	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB915	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB916	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB917	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB920	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB921	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB923	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB925	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB926	1-500-329-21	INDUCTOR, FERRITE BEAD			
FB971	1-500-329-21	INDUCTOR, FERRITE BEAD			
		< FLUORESCENT INDICATOR >			
FL900	1-518-954-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC2	6-803-988-01	IC M30823MH-081GP			
IC10	8-759-653-26	IC LC75878W			
IC62	8-759-830-18	IC RRX9000-0601#1			
IC301	8-759-523-94	IC TC74VHC32FT(EL)			
		< LIQUID CRYSTAL DISPLAY >			
LCD2	1-805-459-11	DISPLAY PANEL, LIQUID CRYSTAL			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
LED901	6-500-475-01	LED SML-310BAT-T86 (SOURCE)	(M8800:US,CND)
LED901	6-500-476-01	LED SML-310BA1T-T86 (SOURCE)	(EXCEPT M8800:US,CND)
LED902	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED902	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED903	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED903	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED904	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED904	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED905	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED905	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED906	6-500-476-01	LED SML-310BA1T-T86 (VOL +)	(EXCEPT M8800:US,CND)
LED906	8-719-053-09	LED SML-310VT-T86 (VOL +)	(M8800:US,CND)
LED907	6-500-476-01	LED SML-310BA1T-T86 (VOL –)	(EXCEPT M8800:US,CND)
LED907	8-719-053-09	LED SML-310VT-T86 (VOL –)	(M8800:US,CND)
LED908	6-500-476-01	LED SML-310BA1T-T86 (SCRL)	(EXCEPT M8800:US,CND)
LED908	8-719-053-09	LED SML-310VT-T86 (SCRL) (M8800:US,CND)	
LED909	6-500-476-01	LED SML-310BA1T-T86 (DSPL) (US,CND)	
LED909	8-719-053-09	LED SML-310VT-T86 (DSPL/PTY) (AEP,UK,E)	
LED910	6-500-476-01	LED SML-310BA1T-T86 (ATT) (US,CND)	
LED910	8-719-053-09	LED SML-310VT-T86 (TA) (AEP,UK,E)	
LED911	6-500-476-01	LED SML-310BA1T-T86 (OFF)	(EXCEPT M8800:US,CND)
LED911	8-719-053-09	LED SML-310VT-T86 (OFF) (M8800:US,CND)	
LED912	6-500-476-01	LED SML-310BA1T-T86 (ENTER)	(EXCEPT M8800:US,CND)
LED912	8-719-053-09	LED SML-310VT-T86 (ENTER)	(M8800:US,CND)
LED913	6-500-476-01	LED SML-310BA1T-T86 (DSO)	(EXCEPT M8800:US,CND)
LED913	8-719-053-09	LED SML-310VT-T86 (DSO) (M8800:US,CND)	
LED914	6-500-476-01	LED SML-310BA1T-T86 (EQ7)	(EXCEPT M8800:US,CND)
LED914	8-719-053-09	LED SML-310VT-T86 (EQ7) (M8800:US,CND)	
LED915	6-500-476-01	LED SML-310BA1T-T86 (MODE)	(EXCEPT M8800:US,CND)
LED915	8-719-053-09	LED SML-310VT-T86 (MODE)	(M8800:US,CND)
LED916	6-500-476-01	LED SML-310BA1T-T86 (SOUND)	(EXCEPT M8800:US,CND)
LED916	8-719-053-09	LED SML-310VT-T86 (SOUND)	(M8800:US,CND)
LED917	6-500-476-01	LED SML-310BA1T-T86 (MENU)	(EXCEPT M8800:US,CND)
LED917	8-719-053-09	LED SML-310VT-T86 (MENU)	(M8800:US,CND)
LED918	6-500-476-01	LED SML-310BA1T-T86 (LIST/CAT) (US,CND)	
LED918	8-719-053-09	LED SML-310VT-T86 (LIST) (AEP,UK,E)	
LED919	6-500-476-01	LED SML-310BA1T-T86 (CLOSE)	(EXCEPT M8800:US,CND)
LED919	8-719-053-09	LED SML-310VT-T86 (CLOSE)	(M8800:US,CND)
LED920	6-500-476-01	LED SML-310BA1T-T86 (⏏)	(EXCEPT M8800:US,CND)
LED920	8-719-053-09	LED SML-310VT-T86 (⏏) (M8800:US,CND)	
LED921	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED921	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED922	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED922	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED923	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED923	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED924	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED924	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED925	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED925	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED926	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED926	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED927	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED927	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED928	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED928	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED929	8-719-053-09	LED SML-310VT-T86 (RING)	
LED930	8-719-053-09	LED SML-310VT-T86 (RING)	
LED931	8-719-053-09	LED SML-310VT-T86 (OPEN) (M8800:US,CND)	
LED931	8-719-080-04	LED CL-190UB-X-T (OPEN)	(EXCEPT M8800:US,CND)
LED932	8-719-053-09	LED SML-310VT-T86 (RING)	
LED933	8-719-053-09	LED SML-310VT-T86 (RING)	
LED934	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED934	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED935	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED935	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED936	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED936	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)
LED937	6-500-475-01	LED SML-310BAT-T86 (RING)	(M8800:US,CND)
LED937	6-500-476-01	LED SML-310BA1T-T86 (RING)	(EXCEPT M8800:US,CND)

DISPLAY

Ref. No.	Part No.	Description	Remark
LED942	6-500-475-01	LED SML-310BAT-T86 (SOURCE)	(M8800:US,CND)
LED942	6-500-476-01	LED SML-310BA1T-T86 (SOURCE)	(EXCEPT M8800:US,CND)
LED943	8-719-053-09	LED SML-310VT-T86 (IMAGE)	(M8800:US,CND)
LED943	8-719-080-04	LED CL-190UB-X-T (IMAGE)	(EXCEPT M8800:US,CND)
LED955	6-500-855-01	LED CL-490S-WF-SD-TS (LCD BACK LIGHT)	
LED957	6-500-476-01	LED SML-310BA1T-T86 (DSO)	(EXCEPT M8800:US,CND)
LED957	8-719-053-09	LED SML-310VT-T86 (DSO) (M8800:US,CND)	
LED958	6-500-476-01	LED SML-310BA1T-T86 (EQ7)	(EXCEPT M8800:US,CND)
LED958	8-719-053-09	LED SML-310VT-T86 (EQ7) (M8800:US,CND)	
		< TRANSISTOR >	
Q903	8-729-049-43	TRANSISTOR STB1132Y	
Q904	8-729-055-94	TRANSISTOR SRC1202SF	
Q905	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q906	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q907	8-729-216-22	TRANSISTOR 2SA1162-G	
Q908	8-729-055-94	TRANSISTOR SRC1202SF	
Q909	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q910	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q911	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q912	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q913	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q914	8-729-904-66	TRANSISTOR DTD113EK-T-146	
Q915	8-729-904-66	TRANSISTOR DTD113EK-T-146	
		< RESISTOR >	
R901	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R902	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R903	1-216-037-00	METAL CHIP 330 5% 1/10W	
R904	1-216-037-00	METAL CHIP 330 5% 1/10W	
R905	1-218-863-11	RES-CHIP 4.7K 2% 1/16W	
R906	1-218-859-11	RES-CHIP 3.3K 2% 1/16W	
R907	1-218-855-11	RES-CHIP 2.2K 2% 1/16W	
R908	1-218-851-11	RES-CHIP 1.5K 2% 1/16W	
R909	1-218-851-11	RES-CHIP 1.5K 2% 1/16W	
R910	1-218-847-11	RES-CHIP 1K 2% 1/16W	
R911	1-219-286-11	RES-CHIP 680 2% 1/16W	
R912	1-219-286-11	RES-CHIP 680 2% 1/16W	
R913	1-219-286-11	RES-CHIP 680 2% 1/16W	
R914	1-218-867-11	RES-CHIP 6.8K 2% 1/16W	
R915	1-218-863-11	RES-CHIP 4.7K 2% 1/16W	
R916	1-218-859-11	RES-CHIP 3.3K 2% 1/16W	
R917	1-218-855-11	RES-CHIP 2.2K 2% 1/16W	
R918	1-218-851-11	RES-CHIP 1.5K 2% 1/16W	
R919	1-218-851-11	RES-CHIP 1.5K 2% 1/16W	
R920	1-218-847-11	RES-CHIP 1K 2% 1/16W	
R921	1-219-286-11	RES-CHIP 680 2% 1/16W	
R922	1-219-286-11	RES-CHIP 680 2% 1/16W	
R923	1-219-286-11	RES-CHIP 680 2% 1/16W	
R924	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R924	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R925	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R925	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R926	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R926	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R927	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R927	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R928	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R929	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R930	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R930	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R931	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R931	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R932	1-216-037-00	METAL CHIP 330 5% 1/10W	
R933	1-216-037-00	METAL CHIP 330 5% 1/10W	
R934	1-216-037-00	METAL CHIP 330 5% 1/10W	
R935	1-216-033-00	METAL CHIP 220 5% 1/10W	
R936	1-216-045-00	METAL CHIP 680 5% 1/10W	
R937	1-216-037-00	METAL CHIP 330 5% 1/10W	
R939	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R940	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R941	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R942	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R943	1-216-037-00	METAL CHIP 330 5% 1/10W	
R944	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R945	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R945	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R946	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R947	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R948	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R949	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R950	1-216-041-00	METAL CHIP 470 5% 1/10W	
R951	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R951	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R952	1-216-037-00	METAL CHIP 330 5% 1/10W	
R953	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R953	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R954	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R954	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)
R955	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R956	1-216-037-00	METAL CHIP 330 5% 1/10W	(EXCEPT M8800:US,CND)
R956	1-216-049-11	RES-CHIP 1K 5% 1/10W	(M8800:US,CND)

Ref. No.	Part No.	Description			Remark
R957	1-216-037-00	METAL CHIP	330	5%	1/10W
R958	1-216-037-00	METAL CHIP	330	5%	1/10W
			(EXCEPT M8800:US,CND)		
R958	1-216-049-11	RES-CHIP	1K	5%	1/10W
			(M8800:US,CND)		
R959	1-216-037-00	METAL CHIP	330	5%	1/10W
R960	1-216-049-11	RES-CHIP	1K	5%	1/10W
R961	1-216-037-00	METAL CHIP	330	5%	1/10W
R962	1-216-037-00	METAL CHIP	330	5%	1/10W
R963	1-216-037-00	METAL CHIP	330	5%	1/10W
R964	1-216-821-11	METAL CHIP	1K	5%	1/10W
R965	1-216-821-11	METAL CHIP	1K	5%	1/10W
R966	1-216-037-00	METAL CHIP	330	5%	1/10W
R967	1-216-864-11	METAL CHIP	0	5%	1/10W
R968	1-216-850-11	METAL CHIP	270K	5%	1/10W
R969	1-216-846-11	METAL CHIP	120K	5%	1/10W
R970	1-216-818-11	METAL CHIP	560	5%	1/10W
R971	1-216-017-11	RES-CHIP	47	5%	1/10W
R972	1-216-845-11	METAL CHIP	100K	5%	1/10W
R973	1-216-037-00	METAL CHIP	330	5%	1/10W
R974	1-216-037-00	METAL CHIP	330	5%	1/10W
R975	1-216-037-00	METAL CHIP	330	5%	1/10W
R976	1-216-037-00	METAL CHIP	330	5%	1/10W
R977	1-216-037-00	METAL CHIP	330	5%	1/10W
R978	1-216-809-11	METAL CHIP	100	5%	1/10W
R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R980	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-821-11	METAL CHIP	1K	5%	1/10W
R982	1-216-841-11	METAL CHIP	47K	5%	1/10W
R983	1-216-049-11	RES-CHIP	1K	5%	1/10W
R984	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R985	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R986	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R987	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R988	1-216-035-00	METAL CHIP	270	5%	1/10W
			(EXCEPT M8800:US,CND)		
R988	1-216-045-00	METAL CHIP	680	5%	1/10W
			(M8800:US,CND)		
R989	1-216-035-00	METAL CHIP	270	5%	1/10W
			(EXCEPT M8800:US,CND)		
R989	1-216-045-00	METAL CHIP	680	5%	1/10W
			(M8800:US,CND)		
R990	1-216-037-00	METAL CHIP	330	5%	1/10W
R991	1-218-855-11	RES-CHIP	2.2K	2%	1/16W
R992	1-218-855-11	RES-CHIP	2.2K	2%	1/16W
R993	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R994	1-216-864-11	METAL CHIP	0	5%	1/10W
R995	1-216-037-00	METAL CHIP	330	5%	1/10W
R996	1-216-037-00	METAL CHIP	330	5%	1/10W
R997	1-216-037-00	METAL CHIP	330	5%	1/10W
R998	1-216-037-00	METAL CHIP	330	5%	1/10W
R999	1-216-017-11	RES-CHIP	47	5%	1/10W
R1000	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
			(EXCEPT M8800:US,CND)		
R1000	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
			(M8800:US,CND)		
R1001	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
			(EXCEPT M8800:US,CND)		
R1001	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
			(M8800:US,CND)		

Ref. No.	Part No.	Description			Remark
R1002	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
			(EXCEPT M8800:US,CND)		
R1002	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
			(M8800:US,CND)		
R1003	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
			(EXCEPT M8800:US,CND)		
R1003	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
			(M8800:US,CND)		
		< SWITCH >			
S901	1-771-884-31	SWITCH, TACTILE (OFF)			
S902	1-771-884-31	SWITCH, TACTILE (SOURCE)			
S903	1-771-884-31	SWITCH, TACTILE (CLOSE)			
S904	1-771-884-31	SWITCH, TACTILE (VOL –)			
S905	1-771-884-31	SWITCH, TACTILE (VOL +)			
S906	1-771-884-31	SWITCH, TACTILE (ENTER)			
S907	1-771-884-31	SWITCH, TACTILE (I◀◀/◀◀)			
S908	1-771-884-31	SWITCH, TACTILE (DSO)			
S909	1-771-884-31	SWITCH, TACTILE (SOUND)			
S910	1-771-884-31	SWITCH, TACTILE (MODE)			
S911	1-771-884-31	SWITCH, TACTILE (⏏)			
S912	1-771-884-31	SWITCH, TACTILE (LIST/CAT) (US,CND)			
S912	1-771-884-31	SWITCH, TACTILE (LIST) (AEP,UK,E)			
S913	1-771-884-31	SWITCH, TACTILE (MENU)			
S914	1-771-884-31	SWITCH, TACTILE (EQ7)			
S915	1-771-884-31	SWITCH, TACTILE (DISC –)			
S916	1-771-884-31	SWITCH, TACTILE (▶▶I/▶▶)			
S917	1-771-884-31	SWITCH, TACTILE (DISC +)			
S918	1-771-884-31	SWITCH, TACTILE (SCRL)			
S919	1-771-884-31	SWITCH, TACTILE (DSPL) (US,CND)			
S919	1-771-884-31	SWITCH, TACTILE (DSPL/PTY) (AEP,UK,E)			
S920	1-771-884-31	SWITCH, TACTILE (IMAGE)			
S921	1-771-884-31	SWITCH, TACTILE (ATT) (US,CND)			
S921	1-771-884-31	SWITCH, TACTILE (TA) (AEP,UK,E)			
S931	1-771-884-31	SWITCH, TACTILE (OPEN)			
S932	1-771-884-31	SWITCH, TACTILE (RESET)			
		< VIBRATOR >			
X301	1-813-250-11	VIBRATOR, CRYSTAL (SMD) (8MHz)			
**********					
	A-3283-596-A	MAIN BOARD, COMPLETE (including SPEAKER BOARD) (US,CND)			
	A-3283-622-A	MAIN BOARD, COMPLETE (including SPEAKER BOARD) (AEP,UK,E)			
		**********			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C101	1-126-940-11	ELECT	330uF	20%	16V
C102	1-126-960-11	ELECT	1uF	20%	50V
C103	1-131-868-81	ELECT	3300uF	20%	16V
C104	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C105	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C106	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C110	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

MAIN

Ref. No.	Part No.	Description			Remark
C112	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C142	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C172	1-126-963-11	ELECT	4.7uF	20%	50V
C173	1-126-964-11	ELECT	10uF	20%	50V
C178	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C182	1-126-963-11	ELECT	4.7uF	20%	50V
C183	1-126-964-11	ELECT	10uF	20%	50V
C188	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C199	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C201	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C202	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C203	1-126-961-11	ELECT	2.2uF	20%	50V
C204	1-126-965-11	ELECT	22uF	20%	50V
C205	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C206	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C207	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C208	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C209	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C210	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C212	1-126-934-11	ELECT	220uF	20%	16V
C214	1-126-964-11	ELECT	10uF	20%	50V
C215	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C216	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C217	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C218	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C219	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C221	1-104-665-11	ELECT	100uF	20%	10V
C223	1-126-964-11	ELECT	10uF	20%	50V
C224	1-104-665-11	ELECT	100uF	20%	10V
C226	1-126-964-11	ELECT	10uF	20%	50V
C242	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C271	1-126-924-11	ELECT	330uF	20%	10V
C272	1-126-963-11	ELECT	4.7uF	20%	50V
C273	1-126-964-11	ELECT	10uF	20%	50V
C274	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C278	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C282	1-126-963-11	ELECT	4.7uF	20%	50V
C283	1-126-964-11	ELECT	10uF	20%	50V
C288	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C301	1-104-665-11	ELECT	100uF	20%	10V
C302	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C303	1-104-665-11	ELECT	100uF	20%	10V
C304	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C306	1-126-965-11	ELECT	22uF	20%	50V
C308	1-126-960-11	ELECT	1uF	20%	50V
C309	1-126-960-11	ELECT	1uF	20%	50V
C311	1-125-710-11	DOUBLE LAYERS	0.1F		5.5V
C312	1-104-665-11	ELECT	100uF	20%	10V
C313	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C315	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C316	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C318	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C320	1-126-961-11	ELECT	2.2uF	20%	50V
C321	1-126-964-11	ELECT	10uF	20%	50V
C322	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C323	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C325	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C332	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C333	1-126-965-11	ELECT	22uF	20%	50V
C334	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C400	1-126-964-11	ELECT	10uF	20%	50V
C401	1-126-947-11	ELECT	47uF	20%	16V
C403	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C405	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C416	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C417	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C418	1-126-964-11	ELECT	10uF	20%	50V
C419	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C420	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C421	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C422	1-104-665-11	ELECT	100uF	20%	10V
C423	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C424	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C425	1-136-154-00	FILM	0.012uF	5%	50V
C426	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C427	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C428	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C429	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C430	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C431	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C432	1-136-154-00	FILM	0.012uF	5%	50V
C433	1-126-960-11	ELECT	1uF	20%	50V
C434	1-126-960-11	ELECT	1uF	20%	50V
C435	1-126-960-11	ELECT	1uF	20%	50V
C437	1-104-665-11	ELECT	100uF	20%	10V
C438	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C439	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C440	1-104-665-11	ELECT	100uF	20%	10V
C441	1-126-964-11	ELECT	10uF	20%	50V
C442	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C443	1-126-964-11	ELECT	10uF	20%	50V
C444	1-126-964-11	ELECT	10uF	20%	50V
C445	1-126-964-11	ELECT	10uF	20%	50V
C446	1-126-964-11	ELECT	10uF	20%	50V
C447	1-126-964-11	ELECT	10uF	20%	50V
C448	1-126-964-11	ELECT	10uF	20%	50V
C449	1-126-964-11	ELECT	10uF	20%	50V
C450	1-126-964-11	ELECT	10uF	20%	50V
C451	1-126-964-11	ELECT	10uF	20%	50V
C470	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C475	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C501	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C502	1-126-964-11	ELECT	10uF	20%	50V
C503	1-126-963-11	ELECT	4.7uF	20%	50V (AEP,UK,E)
C505	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C506	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (US,CND)
C507	1-126-934-11	ELECT	220uF	20%	16V
C508	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C509	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C510	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C511	1-126-940-11	ELECT	330uF	20%	16V
C512	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C542	1-162-962-11	CERAMIC CHIP	470PF	10%	50V

Ref. No.	Part No.	Description			Remark
C550	1-162-920-11	CERAMIC CHIP	27PF	5%	50V (AEP,UK,E)
C551	1-162-920-11	CERAMIC CHIP	27PF	5%	50V (AEP,UK,E)
C552	1-164-156-11	CERAMIC CHIP	0.1uF		25V (AEP,UK,E)
C553	1-126-786-11	ELECT	47uF	20%	16V (AEP,UK,E)
C554	1-164-156-11	CERAMIC CHIP	0.1uF		25V (AEP,UK,E)
C555	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V (AEP,UK,E)
C556	1-164-739-11	CERAMIC CHIP	560PF	5%	50V (AEP,UK,E)
C557	1-162-959-11	CERAMIC CHIP	330PF	5%	50V (AEP,UK,E)
C558	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK,E)
C620	1-104-665-11	ELECT	100uF	20%	10V
C621	1-128-576-11	ELECT	100uF	20%	63V
C622	1-126-934-11	ELECT	220uF	20%	16V
C623	1-126-964-11	ELECT	10uF	20%	50V
C624	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C625	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C626	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C627	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C628	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C629	1-104-665-11	ELECT	100uF	20%	10V
C701	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C702	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C703	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C704	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C705	1-126-947-11	ELECT	47uF	20%	16V
C706	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C707	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C708	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C709	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C801	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C901	1-126-965-11	ELECT	22uF	20%	50V
C903	1-126-963-11	ELECT	4.7uF	20%	50V
C928	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C930	1-126-965-11	ELECT	22uF	20%	50V
		< CONNECTOR >			
* CN401	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN506	1-563-608-11	CONNECTOR, FLEXIBLE 5P			
* CN902	1-566-760-11	PIN, CONNECTOR (PC BOARD) 5P			
CNP101	1-774-701-21	PIN, CONNECTOR 16P			
CNP102	1-580-907-41	PLUG, CONNECTOR (BUS CONTROL IN)			
CNP301	1-817-536-11	CONNECTOR, BOARD TO BOARD 28P			
CNP909	1-774-677-21	CONNECTOR, FPC (ZIF) 24P			
		< JACK >			
CNJ101	1-764-270-21	JACK, STEREO MINIATURE (DIA.3.5)			(REMOTE IN)

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D101	8-719-083-66	DIODE UDZS-TE17-18B	
D102	8-719-083-66	DIODE UDZS-TE17-18B	
D103	8-719-420-51	DIODE MA729	
D104	8-719-069-56	DIODE UDZS-TE17-6.2B	
D105	8-719-083-66	DIODE UDZS-TE17-18B	
D106	8-719-977-12	DIODE DTZ6.8B	
D108	8-719-083-66	DIODE UDZS-TE17-18B	
D109	8-719-049-38	DIODE 1N5404TU	
D110	8-719-053-18	DIODE 1SR154-400TE-25	
D111	8-719-053-18	DIODE 1SR154-400TE-25	
D112	8-719-053-18	DIODE 1SR154-400TE-25	
D113	8-719-053-18	DIODE 1SR154-400TE-25	
D114	8-719-053-18	DIODE 1SR154-400TE-25	
D115	8-719-053-18	DIODE 1SR154-400TE-25	
D116	8-719-053-18	DIODE 1SR154-400TE-25	
D117	8-719-053-18	DIODE 1SR154-400TE-25	
D118	6-500-508-01	DIODE RR263M-400FTR	
D119	6-500-508-01	DIODE RR263M-400FTR	
D120	6-500-508-01	DIODE RR263M-400FTR	
D121	6-500-508-01	DIODE RR263M-400FTR	
D122	8-719-977-12	DIODE DTZ6.8B	
D123	8-719-083-66	DIODE UDZS-TE17-18B	
D301	8-719-420-51	DIODE MA729	
D302	8-719-420-51	DIODE MA729	
D303	8-719-420-51	DIODE MA729	
D304	8-719-080-34	DIODE SDS511	
D305	8-719-080-34	DIODE SDS511	
D401	8-719-404-50	DIODE MA111-TX	
D403	8-719-069-55	DIODE UDZS-TE17-5.6B	
D501	8-719-069-55	DIODE UDZS-TE17-5.6B	
D620	8-719-053-18	DIODE 1SR154-400TE-25	
D621	8-719-053-18	DIODE 1SR154-400TE-25	
D622	8-719-055-33	DIODE D1FL40	
D623	8-719-055-30	DIODE D1FS4A-TA	
D624	8-719-055-30	DIODE D1FS4A-TA	
D625	8-719-083-66	DIODE UDZS-TE17-18B	
D626	8-719-069-54	DIODE UDZS-TE17-5.1B	
D627	8-719-420-51	DIODE MA729	
D703	8-719-078-31	DIODE SDS2836F	
D808	8-719-977-12	DIODE DTZ6.8B	
D810	8-719-977-12	DIODE DTZ6.8B	
D819	8-719-977-12	DIODE DTZ6.8B	
D822	8-719-977-12	DIODE DTZ6.8B	
D825	8-719-977-12	DIODE DTZ6.8B	
D826	8-719-977-12	DIODE DTZ6.8B	
D827	8-719-977-12	DIODE DTZ6.8B	
D828	8-719-977-12	DIODE DTZ6.8B	
D829	8-719-977-12	DIODE DTZ6.8B	
D831	8-719-977-12	DIODE DTZ6.8B	
D832	8-719-080-34	DIODE SDS511	
D843	8-719-977-12	DIODE DTZ6.8B	
D904	8-719-080-34	DIODE SDS511	
D906	8-719-420-51	DIODE MA729	
D907	8-719-080-34	DIODE SDS511	
D909	8-719-080-34	DIODE SDS511	
D910	8-719-069-55	DIODE UDZS-TE17-5.6B	

MAIN

Ref. No.	Part No.	Description			Remark
		< FERRITE BEAD >			
FB324	1-414-813-11	FERRITE, EMI (SMD)			
FB401	1-414-813-11	FERRITE, EMI (SMD)			
FB402	1-414-813-11	FERRITE, EMI (SMD)			
FB501	1-414-813-11	FERRITE, EMI (SMD) (AEP,UK,E)			
		< IC >			
IC110	8-759-449-89	IC BA8270F-E2			
IC201	6-705-359-01	IC TDA8588AJ/N2			
IC271	6-703-373-01	IC LC89052T-TLM-E			
IC272	8-759-491-50	IC TC74VHCT244AFT(EL)			
IC273	8-759-679-05	IC TC7WH34FU(TE12R)			
IC302	8-759-658-25	IC PST3432UL			
IC303	6-803-986-01	IC M30624MGP-124GP			
IC401	6-703-303-01	IC TDA7416			
IC402	6-703-419-01	IC LA2901V-TLM-E			
IC431	8-759-385-17	IC NJM4580E(TE2)			
IC451	8-759-385-17	IC NJM4580E(TE2)			
IC470	8-759-385-17	IC NJM4580E(TE2)			
IC550	8-759-650-68	IC SAA6588T/V2-118 (AEP,UK,E)			
IC620	6-705-542-01	IC NJM2377M(TE2)			
IC701	8-759-337-40	IC NJM2904V(TE2)			
IC702	8-759-527-33	IC LB1930M-TLM-E			
IC703	8-759-668-14	IC PQ09DZ1U			
		< JUMPER RESISTOR >			
JR301	1-216-864-11	METAL CHIP	0	5%	1/10W (AEP,UK,E)
JR302	1-216-864-11	METAL CHIP	0	5%	1/10W (US,CND)
		< COIL >			
L101	1-456-617-11	COIL, CHOKE	250uH		
L303	1-414-398-11	INDUCTOR	10uH		
L324	1-216-296-11	SHORT CHIP	0		
L502	1-414-394-41	INDUCTOR	2.2uH		
L503	1-414-394-41	INDUCTOR	2.2uH		
L620	1-456-729-21	COIL, POWER			
L901	1-414-394-41	INDUCTOR	2.2uH		
		< JACK >			
PJ401	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN/AUX IN, AUDIO OUT REAR/FRONT)			
PJ501	1-793-598-11	JACK (ANTENNA)			
		< TRANSISTOR >			
Q101	8-729-055-94	TRANSISTOR SRC1202SF			
Q102	8-729-049-40	TRANSISTOR 2SC5343SFG			
Q103	8-729-049-40	TRANSISTOR 2SC5343SFG			
Q110	8-729-055-92	TRANSISTOR SRA2203SF			
Q111	8-729-055-92	TRANSISTOR SRA2203SF			
Q112	8-729-055-96	TRANSISTOR SRC1203SF			
Q113	8-729-055-96	TRANSISTOR SRC1203SF			
Q171	6-550-752-01	TRANSISTOR DTC614TKT146			
Q181	6-550-752-01	TRANSISTOR DTC614TKT146			
Q271	6-550-752-01	TRANSISTOR DTC614TKT146			
Q281	6-550-752-01	TRANSISTOR DTC614TKT146			
Q380	8-729-055-95	TRANSISTOR SRC1204SF (AEP,UK,E)			
Q401	8-729-055-95	TRANSISTOR SRC1204SF			
Q402	8-729-055-91	TRANSISTOR SRA2202SF			
Q408	8-729-053-84	FET SSM3KO9FU(T5LSONY1)			
Q450	6-550-752-01	TRANSISTOR DTC614TKT146			
Q451	6-550-752-01	TRANSISTOR DTC614TKT146			
Q452	6-550-752-01	TRANSISTOR DTC614TKT146			
Q453	6-550-752-01	TRANSISTOR DTC614TKT146			
Q470	6-550-752-01	TRANSISTOR DTC614TKT146			
Q501	8-729-920-85	TRANSISTOR 2SD1664-QR			
Q620	8-729-048-72	TRANSISTOR 2SK2615			
Q621	8-729-055-91	TRANSISTOR SRA2202SF			
Q622	8-729-055-95	TRANSISTOR SRC1204SF			
Q623	8-729-055-95	TRANSISTOR SRC1204SF			
Q624	6-550-828-01	TRANSISTOR RSQ035P03TR			
Q907	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R			
Q914	8-729-055-92	TRANSISTOR SRA2203SF			
Q915	8-729-015-11	TRANSISTOR 2SD1802FAST-TL			
Q916	8-729-055-96	TRANSISTOR SRC1203SF			
		< RESISTOR >			
R101	1-216-835-11	METAL CHIP	15K	5%	1/10W
R102	1-216-821-11	METAL CHIP	1K	5%	1/10W
R103	1-216-821-11	METAL CHIP	1K	5%	1/10W
R104	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R105	1-216-841-11	METAL CHIP	47K	5%	1/10W
R106	1-216-841-11	METAL CHIP	47K	5%	1/10W
R107	1-216-073-00	RES-CHIP	10K	5%	1/10W
R108	1-216-073-00	RES-CHIP	10K	5%	1/10W
R109	1-216-833-11	METAL CHIP	10K	5%	1/10W
R110	1-216-833-11	METAL CHIP	10K	5%	1/10W
R111	1-216-841-11	METAL CHIP	47K	5%	1/10W
R112	1-216-821-11	METAL CHIP	1K	5%	1/10W
R114	1-216-809-11	METAL CHIP	100	5%	1/10W
R115	1-216-809-11	METAL CHIP	100	5%	1/10W
R116	1-216-809-11	METAL CHIP	100	5%	1/10W
R119	1-216-833-11	METAL CHIP	10K	5%	1/10W
R142	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R143	1-216-833-11	METAL CHIP	10K	5%	1/10W
R174	1-216-813-11	METAL CHIP	220	5%	1/10W
R175	1-216-841-11	METAL CHIP	47K	5%	1/10W
R184	1-216-813-11	METAL CHIP	220	5%	1/10W
R185	1-216-841-11	METAL CHIP	47K	5%	1/10W
R201	1-216-841-11	METAL CHIP	47K	5%	1/10W
R202	1-216-809-11	METAL CHIP	100	5%	1/10W
R203	1-216-821-11	METAL CHIP	1K	5%	1/10W
R204	1-216-821-11	METAL CHIP	1K	5%	1/10W
R205	1-216-821-11	METAL CHIP	1K	5%	1/10W
R206	1-216-821-11	METAL CHIP	1K	5%	1/10W
R242	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R243	1-216-833-11	METAL CHIP	10K	5%	1/10W
R274	1-216-813-11	METAL CHIP	220	5%	1/10W
R275	1-216-841-11	METAL CHIP	47K	5%	1/10W
R284	1-216-813-11	METAL CHIP	220	5%	1/10W
R285	1-216-841-11	METAL CHIP	47K	5%	1/10W
R302	1-216-809-11	METAL CHIP	100	5%	1/10W
R303	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R304	1-216-836-11	METAL CHIP	18K	5%	1/10W
R305	1-216-845-11	METAL CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R306	1-216-809-11	METAL CHIP	100	5%	1/10W
R307	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R308	1-216-864-11	METAL CHIP	0	5%	1/10W
R309	1-216-864-11	METAL CHIP	0	5%	1/10W
R319	1-216-821-11	METAL CHIP	1K	5%	1/10W
R322	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R323	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R324	1-216-845-11	METAL CHIP	100K	5%	1/10W
R325	1-216-845-11	METAL CHIP	100K	5%	1/10W
R326	1-216-853-11	METAL CHIP	470K	5%	1/10W
R327	1-216-845-11	METAL CHIP	100K	5%	1/10W
R328	1-216-845-11	METAL CHIP	100K	5%	1/10W
R332	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R333	1-216-809-11	METAL CHIP	100	5%	1/10W
R335	1-216-837-11	METAL CHIP	22K	5%	1/10W
R342	1-216-845-11	METAL CHIP	100K	5%	1/10W
R346	1-216-833-11	METAL CHIP	10K	5%	1/10W
R350	1-216-809-11	METAL CHIP	100	5%	1/10W
R351	1-216-809-11	METAL CHIP	100	5%	1/10W
R356	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R357	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R360	1-216-845-11	METAL CHIP	100K	5%	1/10W (US,CND)
R361	1-216-864-11	METAL CHIP	0	5%	1/10W (AEP,UK,E)
R363	1-216-845-11	METAL CHIP	100K	5%	1/10W
R364	1-216-845-11	METAL CHIP	100K	5%	1/10W
R365	1-216-845-11	METAL CHIP	100K	5%	1/10W
R366	1-216-845-11	METAL CHIP	100K	5%	1/10W
R367	1-216-845-11	METAL CHIP	100K	5%	1/10W
R372	1-216-809-11	METAL CHIP	100	5%	1/10W
R377	1-216-845-11	METAL CHIP	100K	5%	1/10W
R380	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP,UK,E)
R401	1-216-017-11	RES-CHIP	47	5%	1/10W
R402	1-216-813-11	METAL CHIP	220	5%	1/10W
R403	1-216-864-11	METAL CHIP	0	5%	1/10W
R407	1-216-841-11	METAL CHIP	47K	5%	1/10W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R414	1-216-833-11	METAL CHIP	10K	5%	1/10W
R415	1-216-833-11	METAL CHIP	10K	5%	1/10W
R416	1-216-809-11	METAL CHIP	100	5%	1/10W
R417	1-216-809-11	METAL CHIP	100	5%	1/10W
R418	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
R420	1-216-833-11	METAL CHIP	10K	5%	1/10W
R421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R422	1-216-813-11	METAL CHIP	220	5%	1/10W
R424	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R426	1-216-864-11	METAL CHIP	0	5%	1/10W
R427	1-216-864-11	METAL CHIP	0	5%	1/10W
R429	1-202-926-11	METAL CHIP	36K	5%	1/10W
R430	1-218-725-11	METAL CHIP	24K	5%	1/10W
R431	1-202-926-11	METAL CHIP	36K	5%	1/10W
R432	1-218-725-11	METAL CHIP	24K	5%	1/10W
R433	1-202-926-11	METAL CHIP	36K	5%	1/10W
R434	1-218-725-11	METAL CHIP	24K	5%	1/10W
R435	1-202-926-11	METAL CHIP	36K	5%	1/10W
R436	1-218-725-11	METAL CHIP	24K	5%	1/10W
R437	1-216-833-11	METAL CHIP	10K	5%	1/10W
R438	1-216-835-11	METAL CHIP	15K	5%	1/10W
R447	1-216-845-11	METAL CHIP	100K	5%	1/10W
R448	1-216-845-11	METAL CHIP	100K	5%	1/10W
R449	1-216-835-11	METAL CHIP	15K	5%	1/10W
R450	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-835-11	METAL CHIP	15K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W
R453	1-216-845-11	METAL CHIP	100K	5%	1/10W
R454	1-216-845-11	METAL CHIP	100K	5%	1/10W
R455	1-216-835-11	METAL CHIP	15K	5%	1/10W
R456	1-216-833-11	METAL CHIP	10K	5%	1/10W
R457	1-216-813-11	METAL CHIP	220	5%	1/10W
R458	1-216-813-11	METAL CHIP	220	5%	1/10W
R459	1-216-813-11	METAL CHIP	220	5%	1/10W
R460	1-216-813-11	METAL CHIP	220	5%	1/10W
R461	1-216-841-11	METAL CHIP	47K	5%	1/10W
R462	1-216-841-11	METAL CHIP	47K	5%	1/10W
R463	1-216-841-11	METAL CHIP	47K	5%	1/10W
R464	1-216-841-11	METAL CHIP	47K	5%	1/10W
R471	1-216-864-11	METAL CHIP	0	5%	1/10W
R472	1-216-835-11	METAL CHIP	15K	5%	1/10W
R473	1-216-833-11	METAL CHIP	10K	5%	1/10W
R477	1-216-841-11	METAL CHIP	47K	5%	1/10W
R501	1-216-821-11	METAL CHIP	1K	5%	1/10W
R502	1-216-864-11	METAL CHIP	0	5%	1/10W
R503	1-216-864-11	METAL CHIP	0	5%	1/10W
R504	1-216-864-11	METAL CHIP	0	5%	1/10W
R505	1-414-394-41	INDUCTOR	2.2uH		
R506	1-216-864-11	METAL CHIP	0	5%	1/10W
R550	1-216-832-11	METAL CHIP	8.2K	5%	1/10W (AEP,UK,E)
R551	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP,UK,E)
R552	1-216-797-11	METAL CHIP	10	5%	1/10W (AEP,UK,E)
R553	1-216-797-11	METAL CHIP	10	5%	1/10W (AEP,UK,E)
R620	1-216-230-00	RES-CHIP	22K	5%	1/8W
R621	1-216-230-00	RES-CHIP	22K	5%	1/8W
R622	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R623	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R624	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R625	1-216-809-11	METAL CHIP	100	5%	1/10W
R626	1-216-848-11	METAL CHIP	180K	5%	1/10W
R627	1-216-846-11	METAL CHIP	120K	5%	1/10W
R628	1-216-841-11	METAL CHIP	47K	5%	1/10W
R629	1-216-833-11	METAL CHIP	10K	5%	1/10W
R630	1-216-837-11	METAL CHIP	22K	5%	1/10W
R631	1-216-833-11	METAL CHIP	10K	5%	1/10W
R632	1-216-841-11	METAL CHIP	47K	5%	1/10W
R633	1-216-809-11	METAL CHIP	100	5%	1/10W
R634	1-216-833-11	METAL CHIP	10K	5%	1/10W
R635	1-216-864-11	METAL CHIP	0	5%	1/10W
R636	1-216-839-11	METAL CHIP	33K	5%	1/10W
R706	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R707	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R708	1-216-845-11	METAL CHIP	100K	5%	1/10W

MAIN **SENSOR** **SERVO**

Ref. No.	Part No.	Description			Remark
R709	1-216-833-11	METAL CHIP	10K	5%	1/10W
R710	1-218-236-11	RES-CHIP	1	10%	1/4W
R711	1-218-236-11	RES-CHIP	1	10%	1/4W
R811	1-216-845-11	METAL CHIP	100K	5%	1/10W
R812	1-216-845-11	METAL CHIP	100K	5%	1/10W
R833	1-216-821-11	METAL CHIP	1K	5%	1/10W
R845	1-216-049-11	RES-CHIP	1K	5%	1/10W
R866	1-216-821-11	METAL CHIP	1K	5%	1/10W
R910	1-216-845-11	METAL CHIP	100K	5%	1/10W
R915	1-216-845-11	METAL CHIP	100K	5%	1/10W
R920	1-216-073-00	RES-CHIP	10K	5%	1/10W
R921	1-216-073-00	RES-CHIP	10K	5%	1/10W
R922	1-216-845-11	METAL CHIP	100K	5%	1/10W
R929	1-216-837-11	METAL CHIP	22K	5%	1/10W
R949	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R950	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
		< TRANSFORMER >			
T620	1-443-323-11	TRANSFORMER, DC-DC CONVERTER			
		< THERMISTOR (POSITIVE) >			
TH100	1-801-792-21	THERMISTOR, POSITIVE			
TH301	1-810-812-21	THERMISTOR, NTC (1608)			
		< TUNER >			
TUX501	A-3220-959-A	TUNER UNIT (TUX-032)			
		< VIBRATOR >			
X301	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)			
X302	1-813-254-11	VIBRATOR, CRYSTAL (6MHz)			
X550	1-579-900-21	VIBRATOR, CRYSTAL (4.3MHz) (AEP,UK,E)			
**********					
		SENSOR BOARD			
		**********			
		< SWITCH >			
SW2	1-529-566-61	SWITCH, PUSH (1 KEY) (SELF)			
SW3	1-529-566-61	SWITCH, PUSH (1 KEY) (DISC IN)			
**********					
	A-3283-359-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C2	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C5	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C7	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C8	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C10	1-104-609-11	ELECT CHIP	100uF	20%	4V
C11	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C13	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C14	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C16	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C18	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C19	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C21	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C22	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C23	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C24	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C25	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C26	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C27	1-126-208-21	ELECT CHIP	47uF	20%	4V
C28	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C29	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C30	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C32	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C33	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C34	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C35	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C36	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C37	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C38	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C39	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C40	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C41	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C42	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C43	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C44	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C45	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C46	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C47	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C48	1-104-609-11	ELECT CHIP	100uF	20%	4V
C49	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C50	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C51	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C52	1-100-381-11	ELECT CHIP	10uF	20%	16V
C53	1-100-381-11	ELECT CHIP	10uF	20%	16V
C54	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C55	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C56	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C57	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C58	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C59	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C60	1-100-381-11	ELECT CHIP	10uF	20%	16V
C63	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C64	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C65	1-126-208-21	ELECT CHIP	47uF	20%	4V
C66	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C67	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C74	1-126-208-21	ELECT CHIP	47uF	20%	4V
C75	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C77	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C79	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C83	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C85	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C86	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C91	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C92	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C109	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C110	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C115	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN1	1-794-153-21	CONNECTOR, FPC (ZIF) 16P			
CN2	1-817-275-21	CONNECTOR, BOARD TO BOARD 28P			
		< JUMPER RESISTOR >			
FB1	1-216-864-11	METAL CHIP	0	5%	1/10W
FB2	1-216-864-11	METAL CHIP	0	5%	1/10W
FB5	1-216-864-11	METAL CHIP	0	5%	1/10W
		< IC >			
IC1	6-705-366-01	IC LA6560-TE-L-E			
IC3	8-753-216-86	IC CXD3059BR			
IC4	6-804-028-01	IC MB90487PFV-G-105-BNDE1			
IC7	6-705-364-01	IC R1114N151D-TR-FA			
IC8	6-705-365-01	IC TC94A34FG-002			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q2	8-729-928-90	TRANSISTOR DTC114EE			
Q3	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q5	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q6	8-729-928-90	TRANSISTOR DTC114EE			
		< RESISTOR >			
R1	1-218-941-81	RES-CHIP	100	5%	1/16W
R2	1-218-971-11	RES-CHIP	33K	5%	1/16W
R3	1-218-971-11	RES-CHIP	33K	5%	1/16W
R4	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7	1-208-635-11	RES-CHIP	10	5%	1/16W
R8	1-218-971-11	RES-CHIP	33K	5%	1/16W
R9	1-218-971-11	RES-CHIP	33K	5%	1/16W
R10	1-218-965-11	RES-CHIP	10K	5%	1/16W
R11	1-218-965-11	RES-CHIP	10K	5%	1/16W
R12	1-208-635-11	RES-CHIP	10	5%	1/16W
R13	1-218-965-11	RES-CHIP	10K	5%	1/16W
R14	1-218-990-11	SHORT CHIP	0		
R15	1-218-990-11	SHORT CHIP	0		
R16	1-218-990-11	SHORT CHIP	0		
R17	1-218-965-11	RES-CHIP	10K	5%	1/16W
R18	1-218-965-11	RES-CHIP	10K	5%	1/16W
R19	1-218-969-11	RES-CHIP	22K	5%	1/16W
R20	1-218-969-11	RES-CHIP	22K	5%	1/16W
R21	1-218-990-11	SHORT CHIP	0		
R22	1-218-967-11	RES-CHIP	15K	5%	1/16W
R23	1-218-967-11	RES-CHIP	15K	5%	1/16W
R24	1-218-953-11	RES-CHIP	1K	5%	1/16W
R25	1-218-953-11	RES-CHIP	1K	5%	1/16W
R26	1-218-981-11	RES-CHIP	220K	5%	1/16W
R27	1-218-965-11	RES-CHIP	10K	5%	1/16W
R28	1-218-990-11	SHORT CHIP	0		
R29	1-218-977-11	RES-CHIP	100K	5%	1/16W
R37	1-218-990-11	SHORT CHIP	0		
R38	1-218-967-11	RES-CHIP	15K	5%	1/16W
R39	1-218-941-81	RES-CHIP	100	5%	1/16W
R40	1-218-990-11	SHORT CHIP	0		
R41	1-218-985-11	RES-CHIP	470K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R42	1-218-965-11	RES-CHIP	10K	5%	1/16W
R43	1-218-977-11	RES-CHIP	100K	5%	1/16W
R44	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R45	1-218-971-11	RES-CHIP	33K	5%	1/16W
R46	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R47	1-218-977-11	RES-CHIP	100K	5%	1/16W
R48	1-218-941-81	RES-CHIP	100	5%	1/16W
R49	1-218-953-11	RES-CHIP	1K	5%	1/16W
R50	1-218-941-81	RES-CHIP	100	5%	1/16W
R52	1-218-941-81	RES-CHIP	100	5%	1/16W
R53	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R54	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R55	1-218-953-11	RES-CHIP	1K	5%	1/16W
R56	1-218-973-11	RES-CHIP	47K	5%	1/16W
R57	1-218-941-81	RES-CHIP	100	5%	1/16W
R59	1-218-941-81	RES-CHIP	100	5%	1/16W
R60	1-218-990-11	SHORT CHIP	0		
R61	1-218-985-11	RES-CHIP	470K	5%	1/16W
R62	1-218-965-11	RES-CHIP	10K	5%	1/16W
R64	1-218-941-81	RES-CHIP	100	5%	1/16W
R65	1-218-941-81	RES-CHIP	100	5%	1/16W
R67	1-218-941-81	RES-CHIP	100	5%	1/16W
R68	1-218-990-11	SHORT CHIP	0		
R69	1-218-973-11	RES-CHIP	47K	5%	1/16W
R70	1-218-945-11	RES-CHIP	220	5%	1/16W
R71	1-218-941-81	RES-CHIP	100	5%	1/16W
R72	1-218-990-11	SHORT CHIP	0		
R73	1-218-941-81	RES-CHIP	100	5%	1/16W
R74	1-218-941-81	RES-CHIP	100	5%	1/16W
R76	1-218-941-81	RES-CHIP	100	5%	1/16W
R77	1-218-947-11	RES-CHIP	330	5%	1/16W
R78	1-218-941-81	RES-CHIP	100	5%	1/16W
R79	1-218-941-81	RES-CHIP	100	5%	1/16W
R80	1-218-977-11	RES-CHIP	100K	5%	1/16W
R81	1-218-941-81	RES-CHIP	100	5%	1/16W
R85	1-218-973-11	RES-CHIP	47K	5%	1/16W
R86	1-218-973-11	RES-CHIP	47K	5%	1/16W
R87	1-218-973-11	RES-CHIP	47K	5%	1/16W
R91	1-220-200-81	RES-CHIP	30K	5%	1/16W
R92	1-218-971-11	RES-CHIP	33K	5%	1/16W
R96	1-218-990-11	SHORT CHIP	0		
R97	1-218-941-81	RES-CHIP	100	5%	1/16W
R98	1-218-941-81	RES-CHIP	100	5%	1/16W
R99	1-218-965-11	RES-CHIP	10K	5%	1/16W
R101	1-218-969-11	RES-CHIP	22K	5%	1/16W
R102	1-218-990-11	SHORT CHIP	0		
R106	1-218-969-11	RES-CHIP	22K	5%	1/16W
R107	1-218-965-11	RES-CHIP	10K	5%	1/16W
R108	1-218-941-81	RES-CHIP	100	5%	1/16W
R109	1-218-953-11	RES-CHIP	1K	5%	1/16W
R110	1-218-945-11	RES-CHIP	220	5%	1/16W
R111	1-218-990-11	SHORT CHIP	0		
R114	1-218-941-81	RES-CHIP	100	5%	1/16W
R115	1-218-941-81	RES-CHIP	100	5%	1/16W
R116	1-218-941-81	RES-CHIP	100	5%	1/16W
R117	1-218-990-11	SHORT CHIP	0		
R119	1-218-941-81	RES-CHIP	100	5%	1/16W
R122	1-218-965-11	RES-CHIP	10K	5%	1/16W

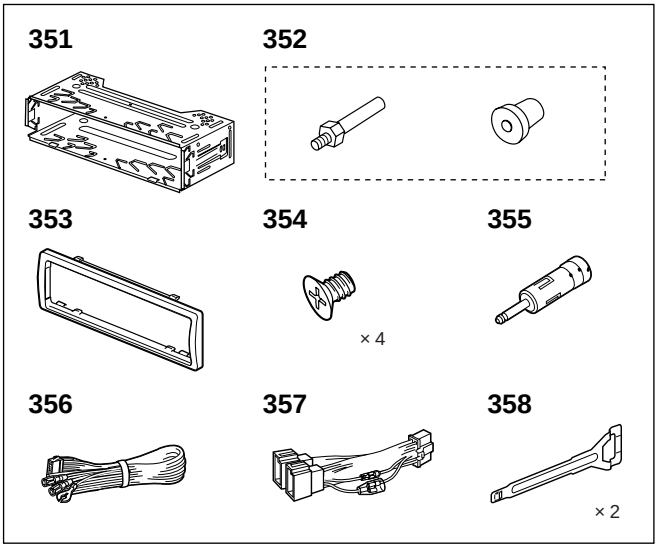
SERVO **SUB**

Ref. No.	Part No.	Description			Remark
R123	1-218-990-11	SHORT CHIP	0		
R124	1-216-864-11	METAL CHIP	0	5%	1/10W
R126	1-218-965-11	RES-CHIP	10K	5%	1/16W
R127	1-218-965-11	RES-CHIP	10K	5%	1/16W
R128	1-218-965-11	RES-CHIP	10K	5%	1/16W
R129	1-218-965-11	RES-CHIP	10K	5%	1/16W
R133	1-216-864-11	METAL CHIP	0	5%	1/10W
R136	1-218-977-11	RES-CHIP	100K	5%	1/16W
R139	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R140	1-218-941-81	RES-CHIP	100	5%	1/16W
R141	1-218-941-81	RES-CHIP	100	5%	1/16W
R142	1-218-941-81	RES-CHIP	100	5%	1/16W
R143	1-218-941-81	RES-CHIP	100	5%	1/16W
R144	1-218-965-11	RES-CHIP	10K	5%	1/16W
R145	1-218-977-11	RES-CHIP	100K	5%	1/16W
R146	1-218-941-81	RES-CHIP	100	5%	1/16W
R147	1-218-941-81	RES-CHIP	100	5%	1/16W
R148	1-218-941-81	RES-CHIP	100	5%	1/16W
		< SWITCH >			
SW1	1-529-565-61	SWITCH, PUSH (1 KEY) (DOWN)			
		< VIBRATOR >			
X1	1-795-561-21	VIBRATOR, CERAMIC (16.9344MHz)			
X2	1-795-822-21	VIBRATOR, CERAMIC (18.43MHz)			
**********					
		SUB BOARD			
		**********			
		< CAPACITOR >			
C533	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C536	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C537	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C538	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C539	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C540	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C541	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
		< DIODE >			
D506	8-719-069-54	DIODE UDZS-TE17-5.1B			
D507	8-719-977-12	DIODE DTZ6.8B			
D511	8-719-083-66	DIODE UDZS-TE17-18B			
D512	8-719-079-10	LED CL-220UB-X-TS (DISC IN)			
D513	8-719-083-14	LED RRX9000-0501 (HI IR)			
D514	8-719-080-34	DIODE SDS511			
		< FERRITE BEAD >			
FB503	1-500-329-21	INDUCTOR, FERRITE BEAD			
		< IC >			
IC503	8-759-830-18	IC RRX9000-0601#1			
		< TRANSISTOR >			
Q503	8-729-216-22	TRANSISTOR 2SA1162-G			
Q504	8-729-055-94	TRANSISTOR SRC1202SF			

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R509	1-216-846-11	METAL CHIP	120K	5%	1/10W
R531	1-216-833-11	METAL CHIP	10K	5%	1/10W
R532	1-216-845-11	METAL CHIP	100K	5%	1/10W
R533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R322	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R534	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R535	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R536	1-216-049-11	RES-CHIP	1K	5%	1/10W
R537	1-216-049-11	RES-CHIP	1K	5%	1/10W
R538	1-216-850-11	METAL CHIP	270K	5%	1/10W
		< SWITCH >			
SW501	1-692-135-21	SWITCH, KEYBOARD (RESET)			
**********					
		MISCELLANEOUS			
		**********			
2	1-776-207-72	CORD (WITH CONNECTOR) (POWER) (US,CND,E)			
2	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)			
58	1-790-375-22	CORD (WITH CONNECTOR) (SUB OUT (MONO))			
105	1-861-811-11	FLEXIBLE BOARD			
⚠203	8-820-207-02	OPTICAL PICK-UP (KSS1000E/K1RP)			
204	A-3337-640-A	CHASSIS (OP) SUB ASSY (including M901)			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
M902	A-3337-638-A	MOTOR ASSY, SL (SLED)			
M903	A-3372-454-A	MOTOR ASSY, LE (LOADING)			
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)			
**********					
		ACCESSORIES			
		**********			
	1-476-546-51	REMOTE COMMANDER (RM-X142) (AEP,UK,E)			
	1-476-546-71	REMOTE COMMANDER (RM-X143A) (US,CND)			
	3-230-549-01	LID, BATTERY CASE (for RM-X142/X143A)			
	3-261-850-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH) (US,CND)			
	3-261-850-21	MANUAL, INSTRUCTION (ENGLISH,GERMAN, FRENCH,ITALIAN,DUTCH) (AEP,UK)			
	3-261-850-31	MANUAL, INSTRUCTION (ENGLISH, TRADITIONAL CHINESE) (E)			
	3-261-851-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH,SPANISH) (US,CND)			
	3-261-851-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, GERMAN,FRENCH,ITALIAN,DUTCH) (AEP,UK)			
	3-261-851-31	MANUAL, INSTRUCTION, INSTALL (ENGLISH, TRADITIONAL CHINESE) (E)			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
351	X-3382-647-1	FRAME ASSY, FITTING	
352	X-3366-405-1	SCREW ASSY (EXP), FITTING (AEP,UK,E)	
353	X-3382-821-1	COLLAR ASSY	
354	3-934-325-01	SCREW (+K 5X8 TP) (US,CND,E)	
355	1-465-459-21	ADAPTOR, ANTENNA (AEP,UK)	
356	1-776-207-72	CORD (WITH CONNECTOR) (POWER)	(US,CND,E)
357	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK)
358	3-246-471-01	KEY (FRAME)	



REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004. 01	New
1.1	2004. 05	Q620 addition. (SPM-04008)